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TECHNICAL MANUAL (Ver. 1.0)

FOR PIONEER PLASMA DISPLAY MONITOR WHEN USED WITH VIDEO CARDS (EXPANSION SOLUTIONS CARDS)

PLASMA DISPLAY MONITOR: PDP-507CMX/PDP-427CMX
VIDEO CARD: PDA-5003/PDA-5004
TABLE TOP STAND: PDK-TS07
TILT MOUNT UNIT: PDK-5011
WALL MOUNT UNIT: PDK-WM01
CEILING MOUNT UNIT: PDK-5012
MOBILE CART: PDK-5014
PDP BRACKET: PDK-5005
SPEAKER SYSTEM: PDP-S53-LR/PDP-S56-LR

This manual provides precautions and information for installation, preparation, and handling of the Plasma Display and its dedicated mounting hardware.
Before installation and preparatory work, choose a safe and appropriate site after thorough consideration of construction, materials used, strength, and surroundings. If adequate safeguards are not in place, immediately halt the installation process and discontinue marketing activities.

ABOUT MOUNTING/INSTALLATION

- This product is sold under the assumption that installation will be performed by experienced, qualified experts. Refer all mounting and installation work to qualified personnel or consult the nearest PIONEER dealer for assistance.
- We accept no responsibility for accident or loss resulting from failure to select an appropriate installation site, situations occurring during assembly, installation, mounting, operation resulting from modifications made to this product, or from natural disasters.

PRECAUTIONS:

- We accept no responsibility for losses resulting from the use of parts other than those supplied by Pioneer or those authorized by Pioneer.
- We guarantee the performance of our products only when they are assembled and adjusted as described in this manual.
- The specifications and external designs shown in this manual are subject to change without notice.

To use this product safely

- When using this product attached to a ceiling or wall or piled up, there is a danger that, according to its weight or attachment method, it may fall down or fall over.
- In order to use this product safely, be sure to have a professional installer or the retail agent perform the installation work. Verify that it is appropriately attached and take adequate safety measures.

Attention professional installer

- Install this product according to the instructions in the owner's manual or installation manual.
- To ensure safety when this product is installed on a ceiling, wall or stacked be sure to take measures to prevent any danger of the panel(s) falling down or falling over.
- Choose an installation or attachment location that has sufficient strength to fully withstand its weight.
- When installing it on the floor, select an adequately stable, flat, and level place.
- To prevent damage to the power or connection cords, take great care not to place any equipment on them or pinch them between any equipment.
- Absolutely do not alter the product or any of its attachment hardware.

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CAUTION ⚠

- To prevent injury and material damage, thoroughly read this manual and all labels found on the equipment before attempting to mount, install, move, or adjust the product.
- Do not install the unit outside or in the open air. Doing so will lead to water seepage into the system, resulting in fire or electric shock.
- Be especially careful when working around parts of the system that have sharp edges.
- When performing installation work from a height, take suitable precautions to guard against falling. Set up a barrier around the work site to prevent accidentally dropped objects that can injure people standing or walking below. Tampering with the unit may result in fire or electrical shock.
- Keep all foreign objects out of the unit. Tampering with the unit may result in fire or electrical shock.
- Observe the following operating environmental limitations:
  Temperature: 0 °C to 40 °C
  Humidity: 20 % to 80 %
- Install the unit only in properly ventilated areas.

Introduction

Introduction

The contents of "5.1 Before Beginning Adjustments (pg. 144)" and subsequent sections are premised on the PDP-507CMX/PDP-427CMX being equipped with the PDA-5003 or PDA-5004. Items that apply only when the PDA-5003 or PDA-5004 is installed are marked with a star '★'.

Precautions

With the PDA-5003 or the PDA-5004 installed, the PDP-507CMX/PDP-427CMX supports the following functions:

Input/output terminals

■ PDA-5003

INPUT 1	Input	• Component video signal • RGB signals from AV devices other than PCs
INPUT 2	Input	• Digital video signal (HDCP supported)
INPUT 3	Input	• Y/C separate video signal
INPUT 4	Input	• Composite video signal
	Output	• Composite video signal
INPUT 3/ INPUT 4	Input	• Audio L/R signal
INPUT 5	Input	• Composite video signal • RGB signals from AV devices or PCs • Audio L/R signal

■ PDA-5004

INPUT 1	Input	• Component video signal • RGB signals from AV devices other than PCs
INPUT 2	Input	• Digital video signal (HDCP supported)
INPUT 3	Input	• Y/C separate video signal • Audio L/R signal
INPUT 4	Input	• Composite video signal • Audio L/R signal
	Output	• Composite video signal
INPUT 5	Input	• Composite video signal • RGB signals from AV devices or PCs • Audio L/R signal

Features and Functions of this device

PDP-507CMX

● Introduces newly developed Wide Plasma Panel
The new, wide, high-precision plasma panel (1365x768 / 16:9) pushes the envelope of previous high-luminance panels, producing brighter, clearer images with higher contrast.

● ES Slot interface for enhanced potential
The display has a built-in ES Slot Interface to allow card installation for the connection of external devices, thus enhancing its expansion potential.

● Supports wide range of computer signals (analog/digital)
This panel supports a wide range of signals including PC standard resolution XGA display, 1920x1080*1, 1360x768, wide signals, DOT BY DOT, full display, etc. It is possible to switch each signal between DOT BY DOT, 4:3, and full display*2.

*1 Only during DVI input of PC signals (compressed display)
*2 Screen size differs according to the signal

● Free Installation Configuration
– Broader installation possibilities with thinner, lighter, high-endurance design –
While producing a large 50" screen image, the display is only 99 mm (3.9") thick, and weighs in at only 35.5 kg (78.3 lbs).
The efficient heat-radiating design greatly improves environmental operating conditions. The thinner, lighter design, coupled to high-endurance construction greatly broadens the range of possible installation locations and methods.

● High reliability for commercial applications
This display has features that give it high dependability in commercial applications. These features include the ability to suppress peak luminance in accordance with the viewing program and to adjust the cooling fan's speed with changes in operating environment. Such features provide safety and high-endurance under conditions of commercial use.

● Improved usability
User convenience has been improved by adding features that make the display even more compatible with your computer. Some of these include the one-touch screen adjustment, [AUTO SET UP] function for computer connections, and the POINT ZOOM function to enlarge local portions of the screen image to display important detailed program data.

PDP-427CMX

● Introduces newly developed Wide Plasma Panel
The new wide high-precision plasma panel (1024x768 / 16:9) pushes the envelope of previous high-luminance panels, producing brighter, clearer images with higher contrast.

● Provides an ES Slot interface for enhanced potential
The display has a built-in ES Slot Interface for installing third-party cards. Cards allow external devices to communicate with the panel, enhancing and expanding its potential.

● Supports wide range of computer signals (analog/digital)
This panel supports a wide range of signals including PC standard resolution XGA display, 1920x1080*1, 1360x768, wide signals, DOT BY DOT, full display, etc. It is possible to switch each signal between DOT BY DOT, 4:3, and full display*2.

*1 Only during DVI input of PC signals (compressed display)
*2 Screen size differs according to the signal

● Free Installation Configuration
– Broader installation possibilities with thinner, lighter, high-endurance design –
While producing a large 42" screen image, the display is only 98 mm thick and weighs in at only 30.5 kg. The efficient heat-radiating design greatly improves environmental operating conditions. The thinner, lighter design coupled to high-endurance construction greatly broadens the range of possible installation locations.

● High reliability for commercial applications
This display is highly dependable in commercial applications because of its ability to supress peak luminance during viewing and adjust cooling fan speeds when the operating environment changes.
Such features provide safety and high-endurance under conditions of commercial use.

● Improved usability
User convenience is improved by making the display more compatible with your computer. Some of these improvements include the one-touch screen adjustment [AUTO SET UP] function for computer connections and the POINT ZOOM function to enlarge selected portions of the screen image to show detailed program data.

● Power-Saving Design
The display has a variety of power-saving functions including an automatic brightness function with ambient light sensing.

2.1 Specifications

PDP-507CMX

Light-emitting panel ..... 50V type AC Plasma Panel
110.36 cm (W) × 62.09 cm (H) × 126.63 cm (diagonal)
Aspect ratio ..... 16 : 9
Pixels ..... 1365 × 768
Pixel pitch ..... 0.81 mm (H•RGB trio) × 0.81 mm (V)

Input/output terminals
Video-related

INPUT 1

Input — Mini D-sub, 15-pin connector (female)
- RGB signal (for SYNC ON G)
  RGB ..... 0.7 Vp-p/75 Ω/no sync
  HD/VS, VD ..... TTL level/positive and negative polarity/2.2 kΩ
  SYNC ON G ..... 1 Vp-p/75 Ω/negative sync.
  *Microsoft Plug & Play (VESA DDC 1/2B) supported

Output — Mini D-sub, 15-pin connector (female)
..... 75 Ω/with buffer

INPUT 2

Input — DVI-D 24-pin connector
Digital RGB signal (DVI compliant TMDS signal)
*Microsoft Plug & Play (VESA DDC 2B) supported

Audio-related

Input — AUDIO INPUT (for INPUT1)
Stero mini jack
L/R ..... 500 mVrms/more than 10 kΩ
AUDIO INPUT (for INPUT2)
Stero mini jack
L/R ..... 500 mVrms/more than 10 kΩ

Output — AUDIO OUTPUT
Stero mini jack
L/R ..... 500 mVrms/less than 5 kΩ
SPEAKER
L/R ..... 6 Ω to 16 Ω/9 W + 9 W (at 6 Ω)

Control-related
RS-232C terminal: D-sub, 9-pin (male)

(NOTE 1)
Combination In/Out Terminal: Mini-DIN, 6-pin

Power requirements ..... AC 100 V to 120 V, 50 Hz/60 Hz
(The power unit range is from AC100 V to 240 V (50 Hz/60 Hz))
In-rush ..... less than 30 A
Power factor ..... more than 0.95
Consumption ..... 340 W ***(NOTE 2)*** (0.6 W in standby)
External dimensions
..... 1222 mm (W) × 736 mm (H) × 99 mm (D)
48-1/8 in. (W) × 28-31/32 in. (H) × 3-29/32 in. (D)
Weight ..... 35.5 kg (78.3 lbs.)
Dimensions of packaging
..... 1340 mm (W) × 900 mm (H) × 365 mm (D)
52-26/32 in. (W) × 35-1/2 in. (H) × 14-7/16 in. (D)
Weight when packaged ..... 44.0 kg (97.1 lbs.)
Operating Temperature .... 0 °C to 40 °C (32 °F to 104 °F) ***(NOTE 3)***
Operating Humidity ..... 20 % to 80 %
Operating atmospheric pressure ..... 800 hPa to 1100 hPa
Storage limitations (when installed)
Temperature ..... –20 °C to +60 °C (–4 °F to 140 °F)
Humidity ..... 20 % to 90 %
Atmospheric pressure ..... 700 hPa to 1114 hPa
Storage limitations (when in original package)
Temperature ..... –30 °C to +60 °C (–22 °F to 140 °F)
Humidity ..... 20 % to 90 %
Atmospheric pressure ..... 700 hPa to 1114 hPa
Stacking ..... Fewer than three tiers

Standard accessories

Power cord (2 m)	1
Ferrite core (for audio cables)	3
Remote control unit	1
AA battery	2
Wiping cloth (for screen)	1
Speed clamp	3
Bead band	3
Operating instructions	1
Warranty	1

Specifications and external designs are subject to change without notice.

(NOTE 1)	The display is preset at the factory to 9600bps. This setting can be changed using either the remote control unit or a PC.
(NOTE 2)	Allow for 370 W = 370 VA of consumption per unit.
(NOTE 3)	The correct operating environmental temperature may vary depending on the installation site (refer to "Installation Site Requirements (pg. 20)".

PDP-427CMX

Light-emitting panel ..... 42V type AC Plasma Panel
92.16 cm (W) × 51.53 cm (H) × 105.59 cm (diagonal)
Aspect ratio ..... 16 : 9
Pixels ..... 1024 × 768
Pixel pitch ..... 0.9 mm (H•RGB trio) × 0.671 mm (V)

Input/output terminals
Video-related

INPUT 1

Input — Mini D-sub, 15-pin connector (female)
- RGB signal (for SYNC ON G)
  RGB ..... 0.7 Vp-p/75 Ω/no sync
  HD/VS, VD ..... TTL level/positive and negative polarity/2.2 kΩ
  SYNC ON G ..... 1 Vp-p/75 Ω/negative sync.
  *Microsoft Plug & Play (VESA DDC 1/2B) supported

Output — Mini D-sub, 15-pin connector (female)
..... 75 Ω/with buffer

INPUT 2

Input — DVI-D 24-pin connector
Digital RGB signal (DVI compliant TMDS signal)
*Microsoft Plug & Play (VESA DDC 2B) supported

Audio-related

Input — AUDIO INPUT (for INPUT1)
Stero mini jack
L/R ..... 500 mVrms/more than 10 kΩ
AUDIO INPUT (for INPUT2)
Stero mini jack
L/R ..... 500 mVrms/more than 10 kΩ

Output — AUDIO OUTPUT
Stero mini jack
L/R ..... 500 mVrms/less than 5 kΩ
SPEAKER
L/R ..... 6 Ω to 16 Ω/8 W + 8 W (at 6 Ω)

Control-related
RS-232C terminal: D-sub, 9-pin (male)

(NOTE 1)
Combination In/Out Terminal: Mini-DIN, 6-pin

Power requirements ..... AC 100 V to 120 V, 50 Hz/60 Hz
(The power unit range is from AC100 V to 240 V (50 Hz/60 Hz))
In-rush ..... less than 30 A
Power factor ..... more than 0.95
Consumption ..... 285 W ***(NOTE 2)*** (1.2 W in standby)
External dimensions (not including the handles and supplied stand)
..... 1022 mm (W) × 610 mm (H) × 98 mm (D)
40-1/4 in. (W) × 24-1/32 in. (H) × 3-27/32 in. (D)
Weight (without attachment stand) ..... 30.5 kg (67.3 lbs.)
Dimensions of packaging
..... 1177 mm (W) × 767 mm (H) × 354 mm (D)
46-11/32 in. (W) × 30-7/32 in. (H) × 13-31/32 in. (D)
Weight when packaged ..... 38 kg (83.8 lbs.)
Operating Temperature .... 0 °C to 40 °C (32 °F to 104 °F) ***(NOTE 3)***
Operating Humidity ..... 20 % to 80 %
Operating atmospheric pressure ..... 800 hPa to 1114 hPa
Storage limitations (when installed)
Temperature ..... –20 °C to +60 °C (–4 °F to 140 °F)
Humidity ..... 20 % to 90 %
Atmospheric pressure ..... 700 hPa to 1114 hPa
Storage limitations (when in original package)
Temperature ..... –30 °C to +60 °C (–22 °F to 140 °F)
Humidity ..... 20 % to 90 %
Atmospheric pressure ..... 700 hPa to 1114 hPa
Stacking ..... Fewer than three tiers

Standard accessories

Power cord	1
Ferrite core (for power cord)	2
Ferrite core (for audio cables)	3
Cable ties	2
Remote control unit	1
AA battery	2
Wiping cloth (for screen)	1
Speed clamp	3
Operating instructions	1
Warranty	1
Remote control unit holder	1
Display stand	2
Washer	2
Hexagon socket head screw (M8 x 40)	2

Specifications and external designs are subject to change without notice.

(NOTE 1)	The display is preset at the factory to 9600bps. This setting can be changed using either the remote control unit or a PC.
(NOTE 2)	Allow for 320 W = 320 VA of consumption per unit.
(NOTE 3)	The correct operating environmental temperature may vary depending on the installation site (refer to "Installation Site Requirements (pg. 20)".

Specifications

INPUT Response Signals

INPUT 1

■ **PC signals supported**

Resolution (Dot x Line)	Refresh rate		Remark
	Vertical	Horizontal	
640x400	70.1 Hz	31.5 kHz	NEC PC-9800
720x400	70.1 Hz	31.5 kHz	NEC PC-9800
	85.1 Hz	37.9 kHz	
640x480	59.9 Hz	31.5 kHz	
	66.7 Hz	35.0 kHz	Apple Macintosh 13"
	72.8 Hz	37.9 kHz	
	75 Hz	37.5 kHz	
	85 Hz	43.3 kHz	
	100.4 Hz	51.1 kHz	I/O DATA
	120.4 Hz	61.3 kHz	I/O DATA
848x480	60 Hz	31.0 kHz	
852x480	60 Hz	31.7 kHz	
800x600	56.3 Hz	35.2 kHz	
	60.3 Hz	37.9 kHz	
	72.2 Hz	48.1 kHz	
	75 Hz	46.9 kHz	
	85.1 Hz	53.7 kHz	
	99.8 Hz	63.0 kHz	I/O DATA
	120 Hz	75.7 kHz	I/O DATA
832x624	74.6 Hz	49.7 kHz	Apple Macintosh 16"
1024x768	60 Hz	48.4 kHz	
	60 Hz	49.7 kHz	Work station (SGI)
	70.1 Hz	56.5 kHz	
	75 Hz (74.9 Hz)	60.0 kHz (60.2 kHz)	( ) indicates Apple Macintosh 19
	85 Hz	68.7 kHz	
	100.6 Hz	80.5 kHz	I/O DATA
	119.4 Hz	95.5 kHz	
1280x768	56.2 Hz	45.1 kHz	
	59.8 Hz	48 kHz	
	69.8 Hz	56 kHz	
1360x765	60 Hz	47.7 kHz	
1360x768	60 Hz	47.7 kHz	I/O DATA
1376x768	59.9 Hz	48.3 kHz	I/O DATA
1280x800	59.8 Hz	49.7 kHz	CVT
1280x854	60 Hz	53.1 kHz	PC
1152x864	60 Hz	53.7 kHz	
	72 Hz	64.9 kHz	
	75 Hz	67.5 kHz	
1152x870	75.1 Hz	68.7 kHz	Apple Macintosh 21"
1152x900	66 Hz	61.8 kHz	Sun Microsystems LO
	76 Hz	71.7 kHz	Sun Microsystems HI
1440x900	59.9 Hz	55.9 kHz	Apple Macintosh 17"
1280x960	60 Hz	60.0 kHz	
	85 Hz	85.9 kHz	
1280x1024	60 Hz	63.9 kHz	Work station (SGI)
	60 Hz	64.0 kHz	
	60 Hz	64.6 kHz	Work station (EWS4800)
	71.2 Hz	75.1 kHz	Work station (EWS4800)
	72 Hz	78.1 kHz	Work station (HP)
	75 Hz	80.0 kHz	
	76.1 Hz	81.1 kHz	Work station (SUN)
	85 Hz	91.1 kHz	
	100.1 Hz	108.5 kHz	I/O DATA
1400x1050	60 Hz	65.3 kHz	
	74.9 Hz	82.3 kHz	
	85 Hz	93.9 kHz	
1680x1050	60 Hz	65.3 kHz	
1600x1200	60 Hz	75.0 kHz	
	65 Hz	81.3 kHz	
	70 Hz	87.5 kHz	
	75 Hz	93.8 kHz	
	85 Hz	106.3 kHz	
1920x1200	59.9 Hz	74.6 kHz	CVT
1920x1200RB	60 Hz	74.0 kHz	CVT

INPUT 2

■ **PC signals supported**

Resolution (Dot x Line)	Refresh rate		Remarks
	Vertical	Horizontal	
640x480	59.9 Hz	31.5 kHz	
	72.8 Hz	37.9 kHz	
	75 Hz	37.5 kHz	
	85 Hz	43.3 kHz	
	100.4 Hz	51.1 kHz	
	120.4 Hz	61.3 kHz	
720x400	70.1 Hz	31.5 kHz	NEC PC-9800
	85.1 Hz	37.9 kHz	
848x480	60 Hz	31.0 kHz	
852x480	60 Hz	31.7 kHz	
800x600	56.3 Hz	35.2 kHz	
	60.3 Hz	37.9 kHz	
	72.2 Hz	48.1 kHz	
	75 Hz	46.9 kHz	
	85.1 Hz	53.7 kHz	
	99.8 Hz	63.0 kHz	
	120 Hz	75.7 kHz	
1024x768	60 Hz	48.4 kHz	
	60 Hz	49.7 kHz	Work station (SGI)
	70.1 Hz	56.5 kHz	
	75 Hz	60.0 kHz	
	85 Hz	68.7 kHz	
	100.6 Hz	80.5 kHz	
	119.4 Hz	95.5 kHz	
1280x768	56.2 Hz	45.1 kHz	
	59.8 Hz	48 kHz	
	69.8 Hz	56 kHz	
1280x800	59.8 Hz	49.7 kHz	
1280x854	60 Hz	53.1 kHz	
1360x768	60 Hz	47.7 kHz	I/O DATA
1376x768	59.9 Hz	48.3 kHz	I/O DATA
1152x864	60 Hz	53.7 kHz	
	72 Hz	64.9 kHz	
	75 Hz	67.5 kHz	
1152x900	66 Hz	61.8 kHz	Sun Microsystems LO
	76 Hz	71.7 kHz	Sun Microsystems HI
1440x900	59.9 Hz	55.9 kHz	Apple Macintosh17"
1280x960	60 Hz	60.0 kHz	
	85 Hz	85.9 kHz	
	60 Hz	63.9 kHz	Work station (SGI)
1280x1024	60 Hz	64.0 kHz	
	60 Hz	64.6 kHz	Work station (EWS4800)
	71.2 Hz	75.1 kHz	Work station (EWS4800)
	72 Hz	78.1 kHz	Work station (HP)
	75 Hz	80.0 kHz	
	76.1 Hz	81.1 kHz	Work station (SUN)
	85 Hz	91.1 kHz	
1400x1050	60 Hz	65.3 kHz	
	74.9 Hz	82.3 kHz	
1680x1050	60 Hz	65.3 kHz	
1920x1080	50 Hz	56.2 kHz	
	60 Hz	67.5 kHz	
1600x1200	60 Hz	75.0 kHz	
1920x1200RB	60 Hz	74.0 kHz	CVT

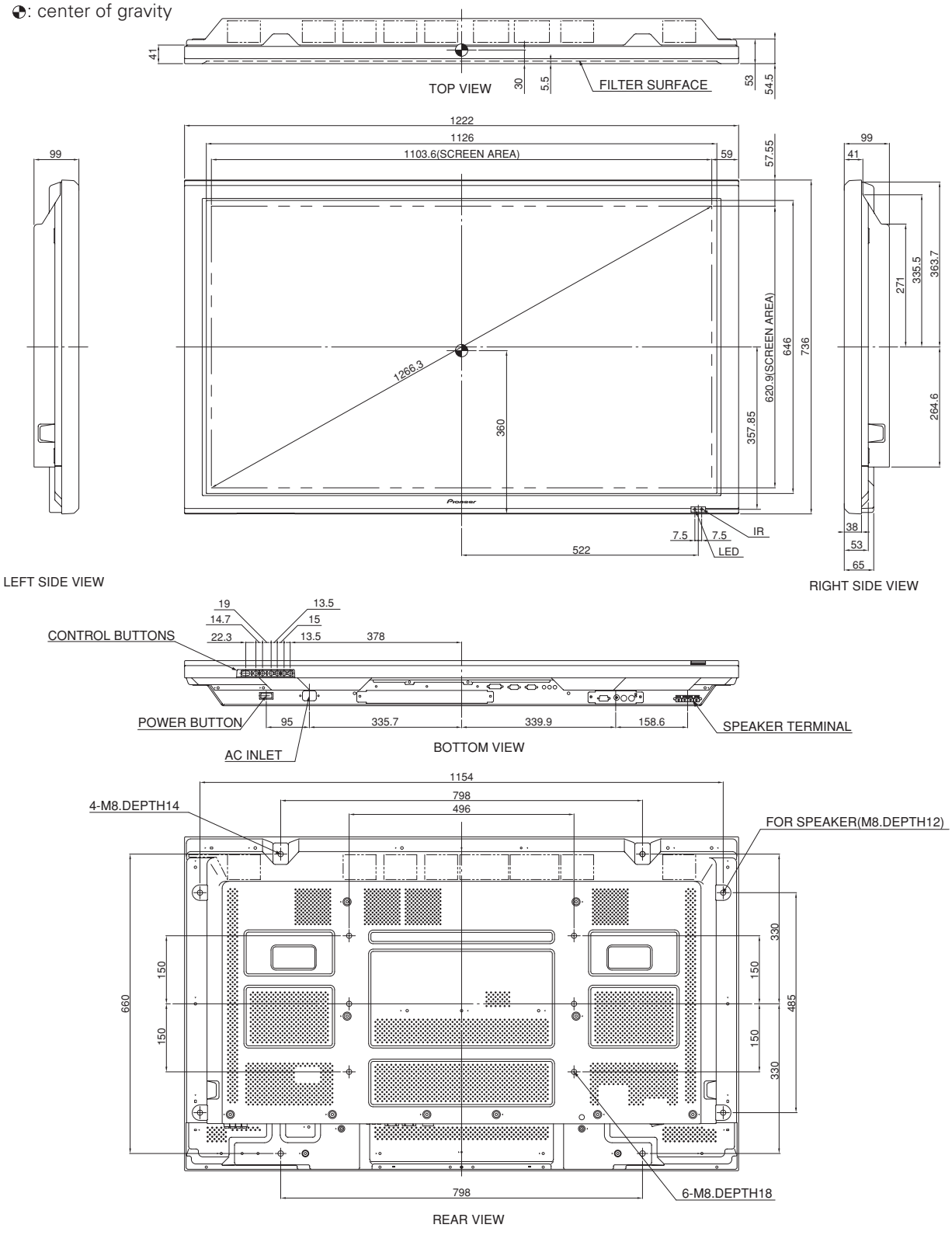
2.2 External Dimensions

PDP-507CMX

WEIGHT: 35.5 kg (78.3 lbs) (without stand)
MATERIAL: Front: Resin; Rear cover: Metal plate, Front protector panel: Glass
TREATMENT: Front: Paint; Rear cover: Paint (All paints are Pioneer original colors)
For packaging information, refer to "3.4.2 Unpacking" (pg. 30).

(Unit: mm)

◔: center of gravity

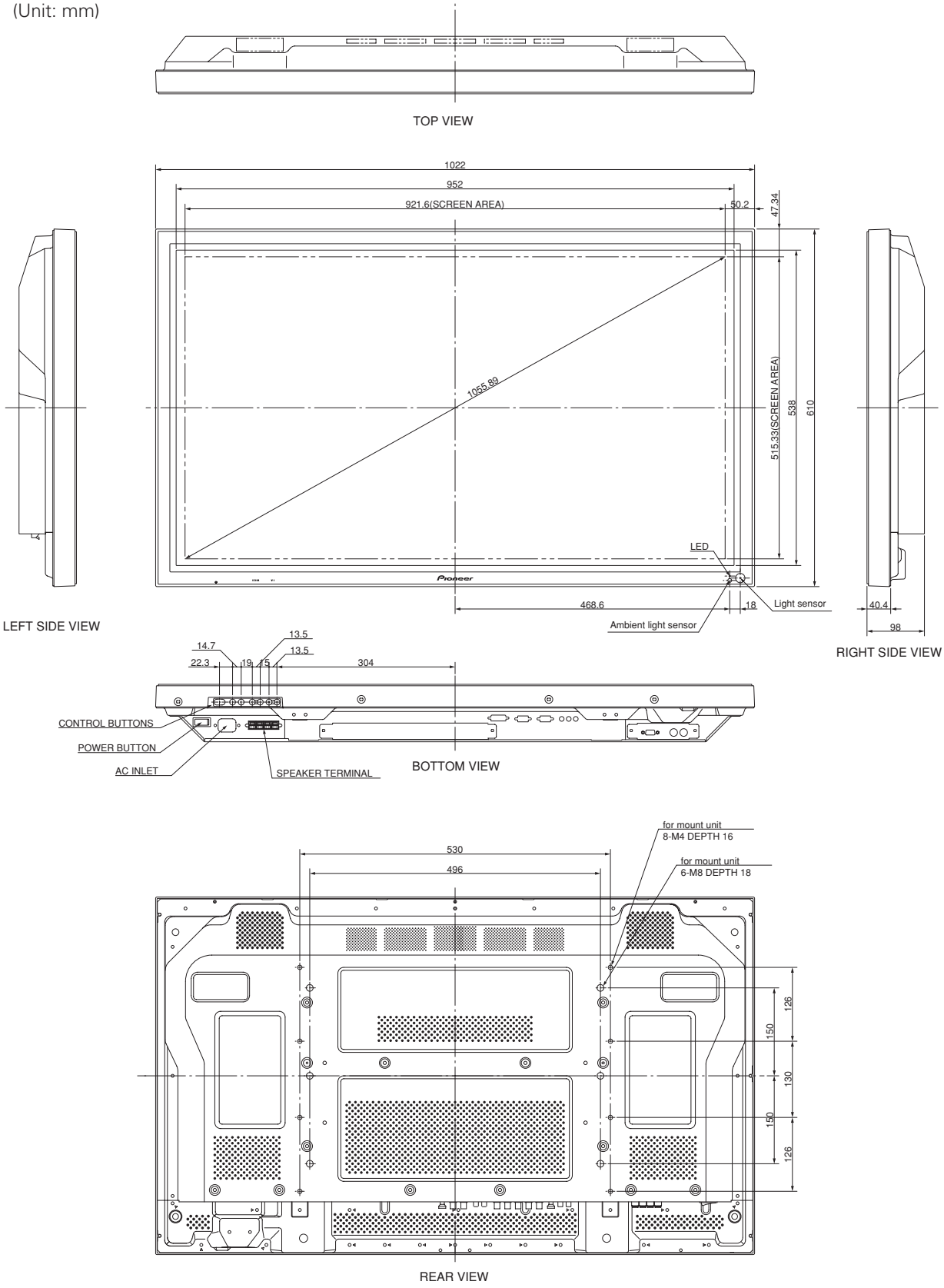


External Dimensions

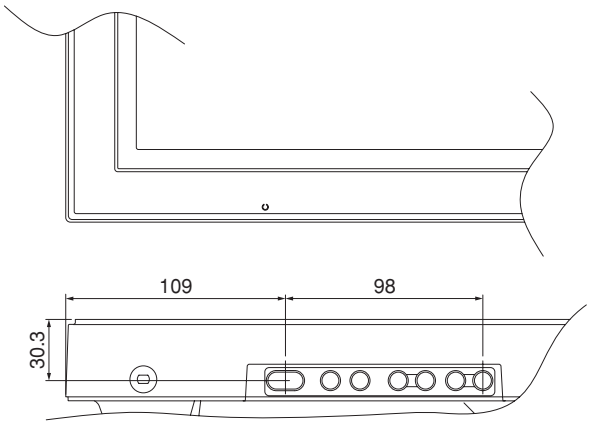
PDP-427CMX

WEIGHT: 30.5 kg (67.3 lbs) (without stand)
MATERIAL: Front: Resin; Rear cover: Metal plate, Front protector panel: Glass
TREATMENT: Front: Paint; Rear cover: Paint (All paints are Pioneer original colors)
For packaging information, refer to "3.4.2 Unpacking" (pg. 30).

(Unit: mm)

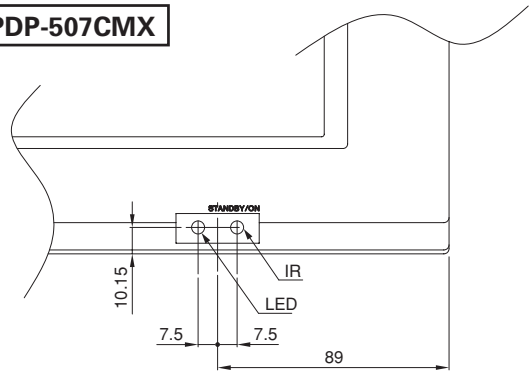


<Main Unit Operation Panel>

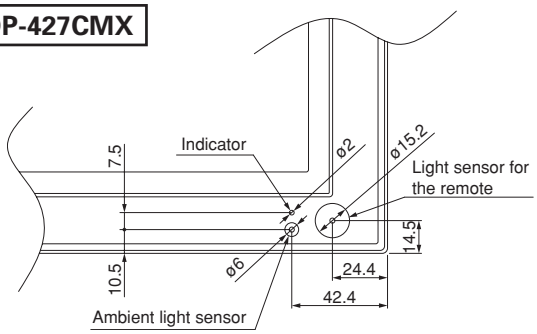


<Light Sensor for the remote/ambient light sensor/indicator>

PDP-507CMX

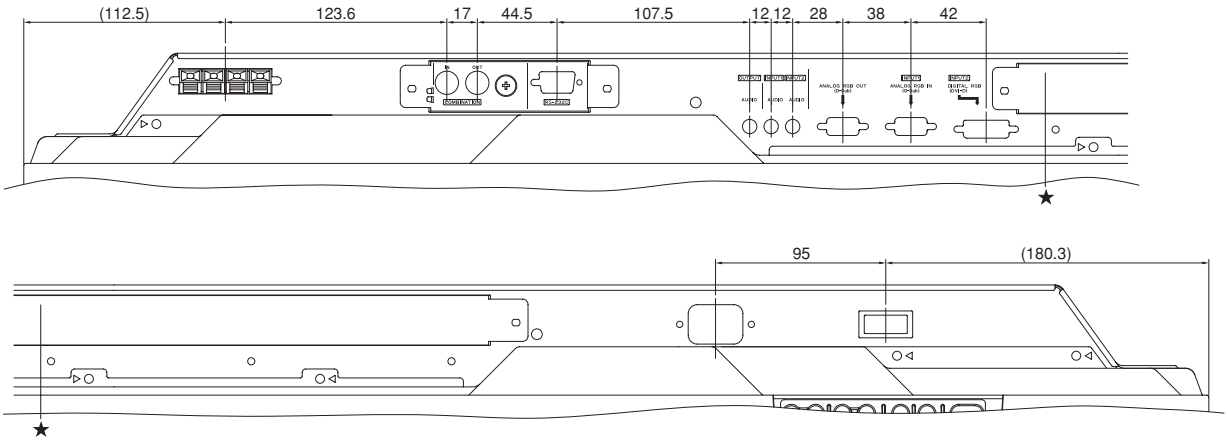


PDP-427CMX

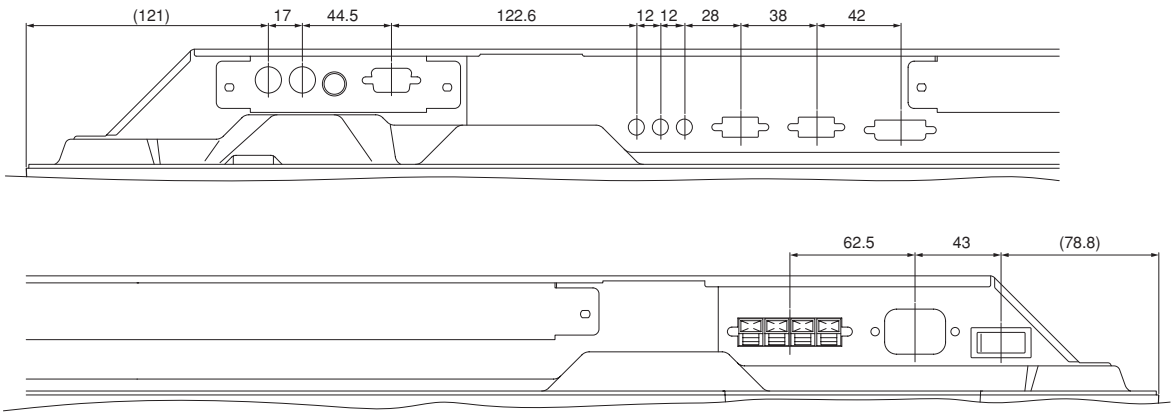


<Connection panel>

PDP-507CMX

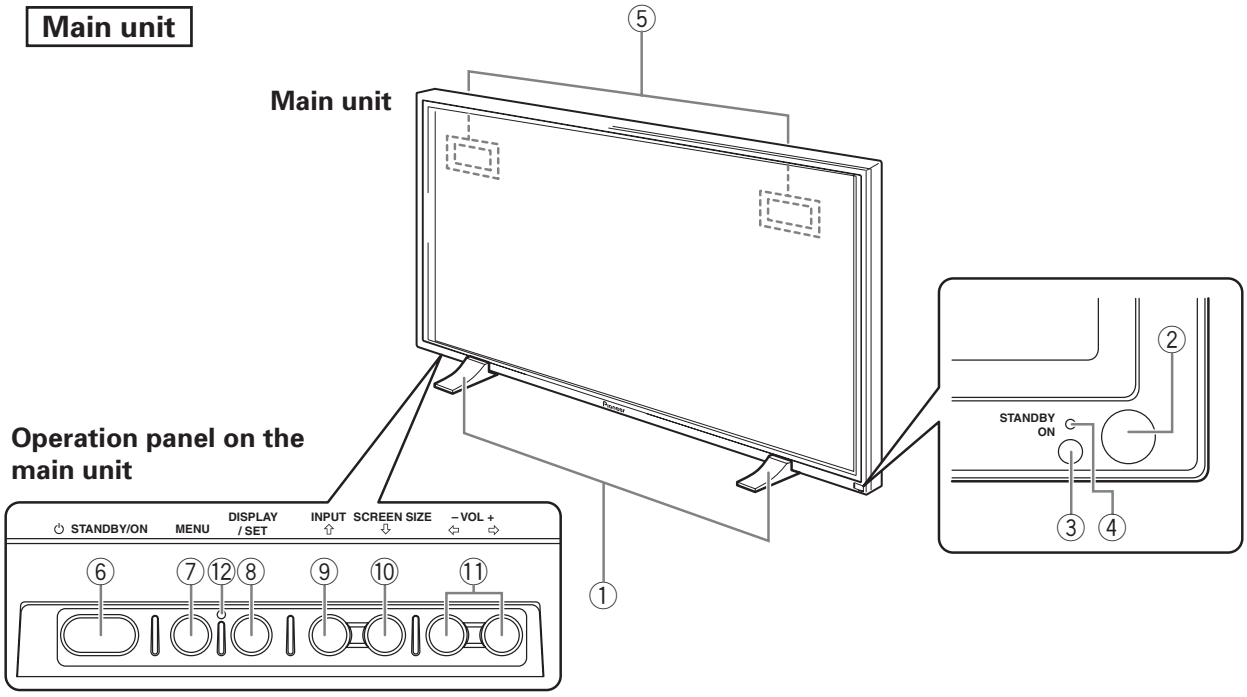


PDP-427CMX



2.3 Controls and Connectors

Main unit



* Illustration depicts PDP-427CMX model.

Main unit

① **Display stand (PDP-427CMX only)**

② **Remote control sensor**
Point the remote control toward the remote sensor to operate the unit.

③ **Ambient light sensor**
This sensor measures the level of light inside the viewing room; it is enabled when the [ENERGY SAVE] option is set to [AUTO].

④ **STANDBY/ON indicator**
When the unit is operating:
The indicator lights green.
When flashing, the light indicates an error.
The indicator flashes green once per second when the [POWER MGT.] function is operating.

When the unit is in Standby, the indicator lights red.
When flashing, the light indicates an error.

⑤ **Handles**

Operation panel on the main unit

⑥ **STANDBY/ON button (⏻)**
Press to put the display in Standby or into operation.

⑦ **MENU button**
Press to open and close the on-screen menu.

⑧ **DISPLAY/SET button**
Use to confirm on-screen menu selections and to change settings.
When not in use by on-screen menus, press to display the current set status.

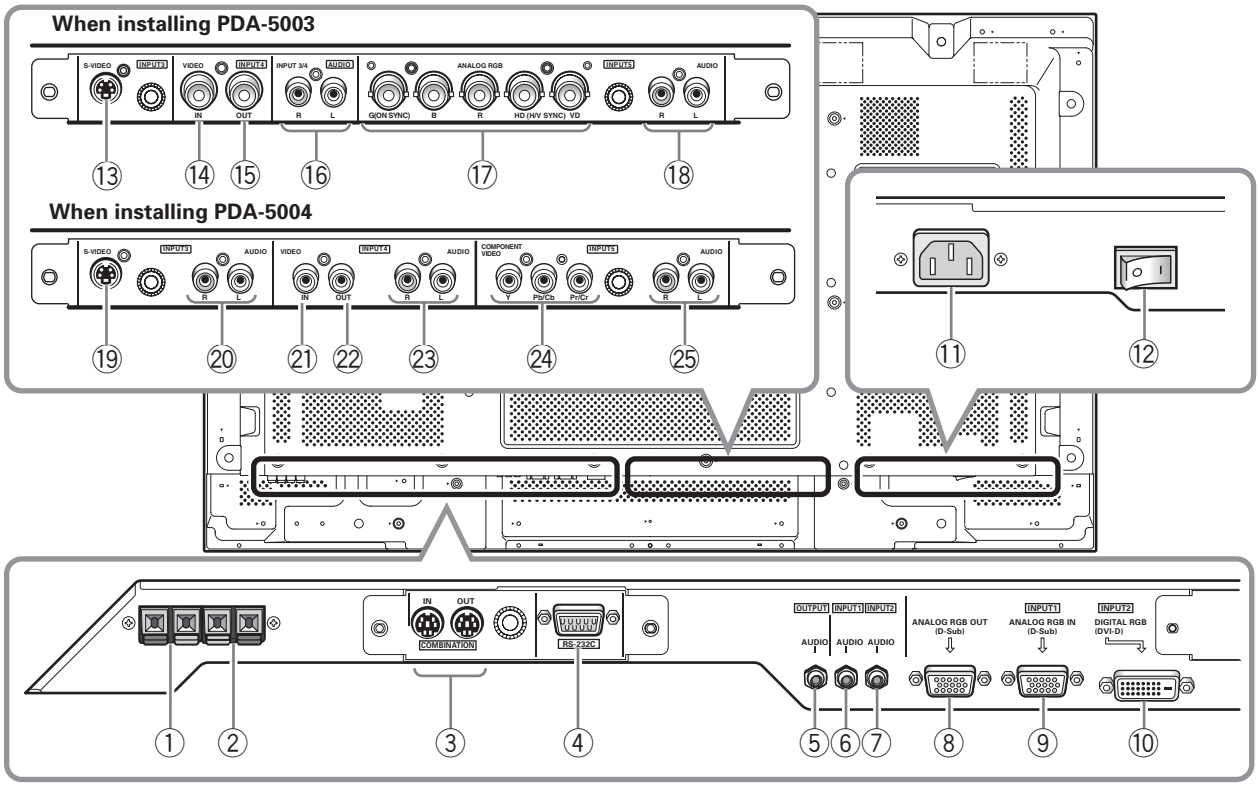
⑨ **INPUT (⇧) button**
Except when menu screen is displayed, this button can change the input.

⑩ **SCREEN SIZE (⇩) button**
Except when menu screen is displayed, this button can change the screen size.

⑪ **VOL +/– (⇦/⇨) buttons**
When not in use for by on-screen menus, these buttons can adjust the sound volume.

⑫ **Functional lock button (concealed button)**
This button is used to switch between permitted and blocked operation of the control panel and the remote control. It can also set the input function memory.

Connection Panel (PDP-507CMX)



Plasma Display Section

① **SPEAKER (R) terminal**
For connection of an external right speaker. Connect a speaker that has an impedance of 6 Ω to 16 Ω.

② **SPEAKER (L) terminal**
For connection of an external left speaker. Connect a speaker that has an impedance of 6 Ω to 16 Ω.

③ **COMBINATION IN/OUT**
Never connect any component to these connectors without first consulting your Pioneer installation technician.
These connectors are used for Plasma Display setup adjustments.

④ **RS-232C**
Never connect any component to this connector without first consulting your Pioneer installation technician.
This connector is used for Plasma Display setup adjustments.

⑤ **AUDIO (OUTPUT) (Stereo mini jack)**
Use to output the audio of the selected source component connected to this unit to an AV amplifier or similar component.
Note: No sound is produced from the AUDIO (OUTPUT) jack when the MAIN POWER switch is set to OFF or when set to Standby.

⑥ **AUDIO (INPUT1) (Stereo mini jack)**
Use to obtain sound when INPUT1 is selected. Connect the audio output jack of components connected to INPUT1 to this unit.

⑦ **AUDIO (INPUT2) (Stereo mini jack)**
Use to obtain sound when INPUT2 is selected. Connect the audio output jack of components connected to INPUT2 to this unit.

⑧ **ANALOG RGB OUT (INPUT1) (mini D-sub 15 pin)**
Use the ANALOG RGB OUT (INPUT1) terminal to output the video signal to an external monitor or other component.
Note: The video signal is not output from the ANALOG RGB OUT (INPUT1) terminal when the panel's main power is OFF or the panel is in Standby.

⑨ **ANALOG RGB IN (INPUT1) (mini D-sub 15 pin)**
For connection of a personal computer (PC) or similar component. Confirm that the connection made corresponds to the signal output from the connected component.

⑩ **DIGITAL RGB (INPUT2) (DVI-D jack)**
Use to connect a computer.
Note: This unit does not support the display of copyguard-protected video signals.

⑪ **AC IN**
Use to connect the supplied power cord to an AC outlet.

⑫ **MAIN POWER switch**
Use to switch the main power of the unit on and off.

Video Card <PDA-5003> Section

The video card provides three video input connectors, one video output connector, and two audio input connectors. Consult the pages noted in parentheses ( ) for details regarding connections to the various jacks and connectors.

⑬ **S-VIDEO (INPUT3) (S-video jack)**
Use this jack to connect components that have an S-video output jack such as a video deck, video camera, laser disc player, or DVD recorder.

⑭ **VIDEO IN (INPUT4) (BNC jack)**
Use this jack to connect components that have a composite video output jack such as a video deck, video camera, laser disc player, or DVD recorder.

⑮ **VIDEO OUT (INPUT4) (BNC jack)**
Use this jack to output the video signal to an external monitor or other component.

Note

The video signal is not output from the VIDEO OUT (INPUT4) jack when the display is OFF or in the Standby mode.

⑯ **AUDIO R/L (INPUT3/4) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT3 or INPUT4 is selected. Connect these jacks to the component's audio outputs that are connected to the video card's INPUT3 or INPUT4.

⑰ **ANALOG RGB (INPUT5) (BNC jacks)**
Use this jack to connect components equipped with RGB outputs jacks such as personal computers, external RGB decoders, or components equipped with component output jacks such as DVD recorders. Verify that the connection corresponds to the signal output from the connected component.

⑱ **AUDIO R/L (INPUT5) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT5 is selected.
Connect these jacks to the component's audio outputs that are connected to the video card's INPUT5.

Video Card <PDA-5004> Section

The video card provides three video input connectors, one video output connector, and three audio input connectors. Consult the pages noted in parentheses ( ) for details regarding connections to the various jacks and connectors.

⑲ **S-VIDEO (INPUT3) (S-video jack)**
Use this jack to connect components that have an S-video output jack such as a video deck, video camera, laser disc player, or DVD recorder.

⑳ **AUDIO R/L (INPUT3) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT3 is selected.
Connect these jacks to the component's audio outputs that are connected to the video card's INPUT3.

㉑ **VIDEO IN (INPUT4) (RCA Pin jack)**
Use this jack to connect components that have a composite video output jack such as a video deck, video camera, laser disc player, or DVD recorder.

㉒ **VIDEO OUT (INPUT4) (RCA Pin jack)**
Use this jack to output the video signal to an external monitor or other component.

Note

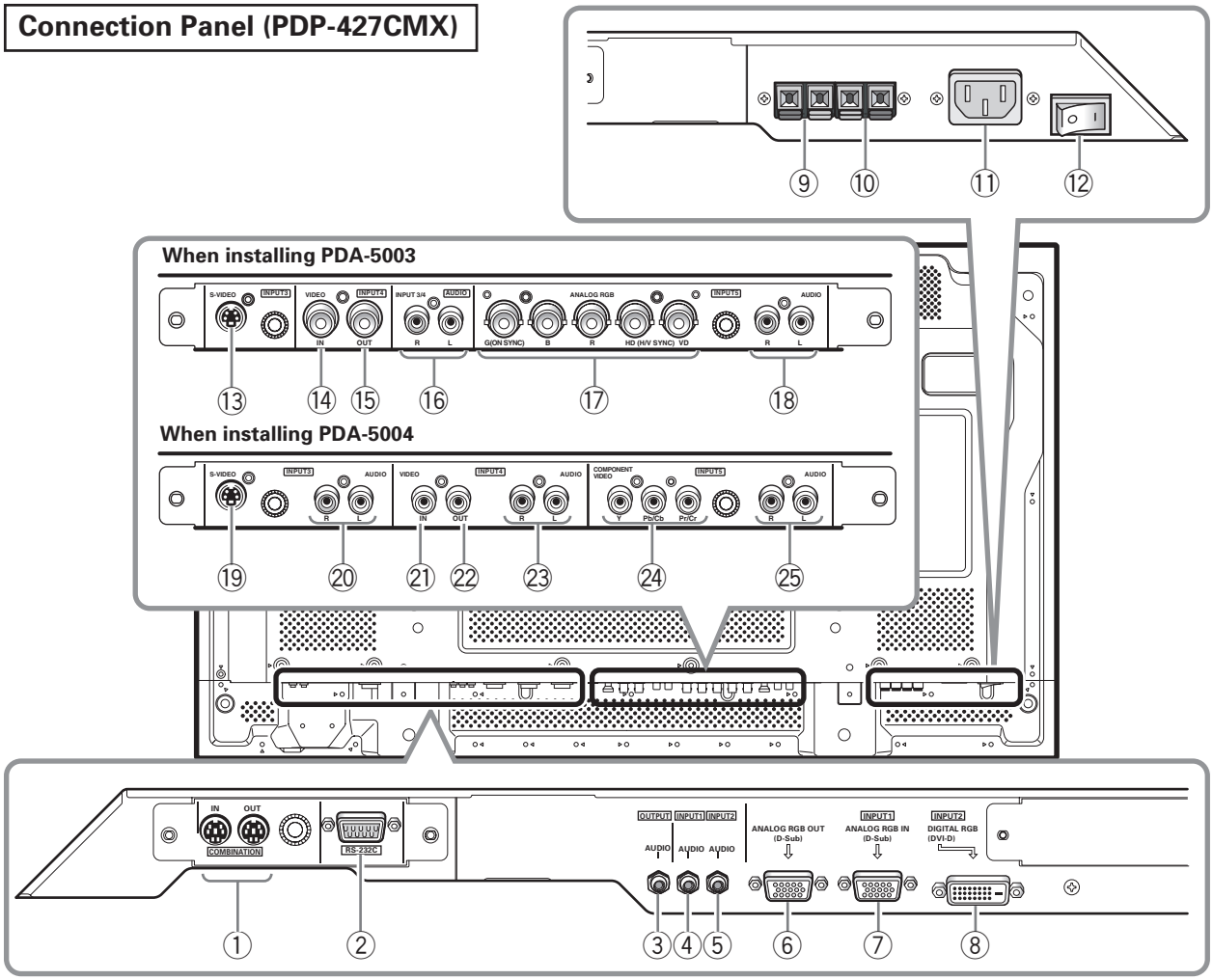
The video signal is not output from the VIDEO OUT (INPUT4) jack when the display is OFF or in Standby.

㉓ **AUDIO R/L (INPUT4) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT4 is selected.
Connect these jacks to the component's audio outputs that are connected to the video card's INPUT4.

㉔ **COMPONENT VIDEO (INPUT5) (RCA Pin jacks)**
Use this jack to connect devices that have component video output jacks such as DVD recorders.

㉕ **AUDIO R/L (INPUT5) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT5 is selected.
Connect these jacks to the device's audio outputs that are connected to the video card's INPUT5.

Connection Panel (PDP-427CMX)



Plasma Display Section

① **COMBINATION IN/OUT**
These connectors are used for Plasma Display setup adjustments.

② **RS-232C**
This connector is used for Plasma Display setup adjustments.

③ **AUDIO (OUTPUT) (Stereo mini jack)**
Use this port to output the audio of the selected source component that is connected to the Plasma Display, to an AV amplifier or similar component.

Note

No sound is produced from the AUDIO (OUTPUT) jack when the display is OFF or in the Standby mode.

④ **AUDIO (INPUT1) (Stereo mini jack)**
Use this port to obtain sound when INPUT1 is selected. Connect this jack to the audio output connector on the device that is connected to the plasma panel's INPUT1.

⑤ **AUDIO (INPUT2) (Stereo mini jack)**
Use this port to obtain sound when INPUT2 is selected. Connect this jack to the audio output connector on the device connected to the Plasma Display's INPUT2.

⑥ **ANALOG RGB OUT (INPUT1) (mini D-sub 15 pin)**
Use this connector to output the video signal to an external monitor or other component.

Note

The video signal is not output from the ANALOG RGB OUT (INPUT1) connector when the main power of this display is OFF or in Standby mode.

⑦ **ANALOG RGB IN (INPUT1) (mini D-sub 15 pin)**
Use this input to connect components equipped with RGB outputs jacks such as personal computers. Verify that the connection corresponds the signal output format from the connected component.

⑧ **DIGITAL RGB (INPUT2) (DVI-D jack)**
Use this input to connect to a computer. Connect to an AV component (HDCP supported) equipped with DVI output connector.

⑨ **SPEAKER (R) terminal**
Use this port to connect an external right speaker. Connect a speaker whose impedance is 6 Ω to 16 Ω.

⑩ **SPEAKER (L) terminal**
Use this port to connect an external left speaker. Connect a speaker whose impedance is 6 Ω to 16 Ω.

⑪ **AC IN**
A power cable is furnished with the Plasma Display. Connect one end of the power cable to this connector and the other end to a standard AC power source.

⑫ **MAIN POWER switch**
Use this switch to toggle the panel's main power ON and OFF.

Video Card <PDA-5003> Section

The video card is provided with 3 video input connectors, 1 video output connector and 2 audio input connectors. Consult the pages noted in parentheses ( ) for details regarding connections to the various jacks and connectors.

⑬ **S-VIDEO (INPUT3) (S-video jack)**
Use this jack to connect components that have an S-video output jack such as a video deck, video camera, laser disc player, or DVD recorder.

⑭ **VIDEO IN (INPUT4) (BNC jack)**
Use this jack to connect components that have a composite video output jack such as a video deck, video camera, laser disc player, or DVD recorder.

⑮ **VIDEO OUT (INPUT4) (BNC jack)**
Use this jack to output the video signal to an external monitor or other component.
Note
The video signal is not output from the VIDEO OUT (INPUT4) jack when the display is OFF or in the Standby mode.

⑯ **AUDIO R/L (INPUT3/4) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT3 or INPUT4 is selected. Connect these jacks to the component's audio outputs that are connected to the video card's INPUT3 or INPUT4.

⑰ **ANALOG RGB (INPUT5) (BNC jacks)**
Use this jack to connect components equipped with RGB outputs jacks such as personal computers, external RGB decoders, or components equipped with component output jacks such as DVD recorders. Verify that the connection corresponds to the signal output format from the connected component.

⑱ **AUDIO R/L (INPUT5) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT5 is selected.
Connect these jacks to the component's audio outputs that are connected to the video card's INPUT5.

Video Card <PDA-5004> Section

The video card provides 3 video input connectors, 1 video output connector and 3 audio input connectors. Consult the pages noted in parentheses ( ) for details regarding connections to the various jacks and connectors.

⑲ **S-VIDEO (INPUT3) (S-video jack)**
Use this jack to connect components that have an S-video output jack such as a video deck, video camera, laser disc player, or DVD recorder.

⑳ **AUDIO R/L (INPUT3) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT3 is selected.
Connect these jacks to the component's audio outputs that are connected to the video card's INPUT3.

㉑ **VIDEO IN (INPUT4) (RCA Pin jack)**
Use this jack to connect components that have a composite video output jack such as a video deck, video camera, laser disc player, or DVD recorder.

㉒ **VIDEO OUT (INPUT4) (RCA Pin jack)**
Use this jack to output the video signal to an external monitor or other component.
Note
The video signal is not output from the VIDEO OUT (INPUT4) jack when the display is OFF or in the Standby mode.

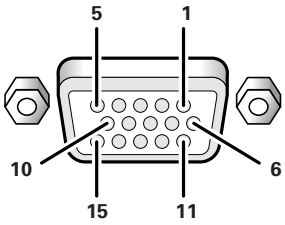
㉓ **AUDIO R/L (INPUT4) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT4 is selected.
Connect these jacks to the component's audio outputs that are connected to the video card's INPUT4.

㉔ **COMPONENT VIDEO (INPUT5) (RCA Pin jacks)**
Use this jack to connect devices that have component video output jacks such as DVD recorders.

㉕ **AUDIO R/L (INPUT5) (RCA Pin jacks)**
Use this jack to obtain sound when INPUT5 is selected.
Connect these jacks to the device's audio outputs that are connected to the video card's INPUT5.

2.4 Pin layout

INPUT1 (Mini D-sub, 15-pin connector; female) pin layout

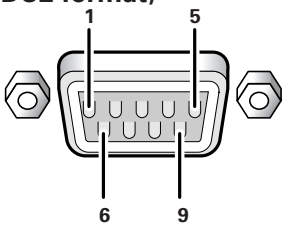


Pin No.	Input	Output
1	R	←
2	G	←
3	B	←
4	NC (not connected)	←
5	GND	←
6	GND	←
7	GND	←
8	GND	←
9	DDC +5V	NC (not connected)
10	GND	←
11	NC (not connected)	←
12	DDC SDA	NC (not connected)
13	HD or H/V SYNC	←
14	VD	←
15	DDC SCL	NC (not connected)

Combination IN/OUT terminal pin layout

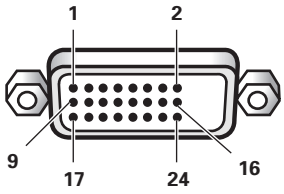
Pin No.	Combination IN	Combination OUT
1	GND	GND
2	NC (not connected)	NC (not connected)
3	TxD (output)	RxD (input)
4	NC (not connected)	NC (not connected)
5	RxD (input)	TxD (output)
6	NC (not connected)	NC (not connected)

RS-232C terminal (D-sub 9-pin connector; male) pin layout (DCE format)



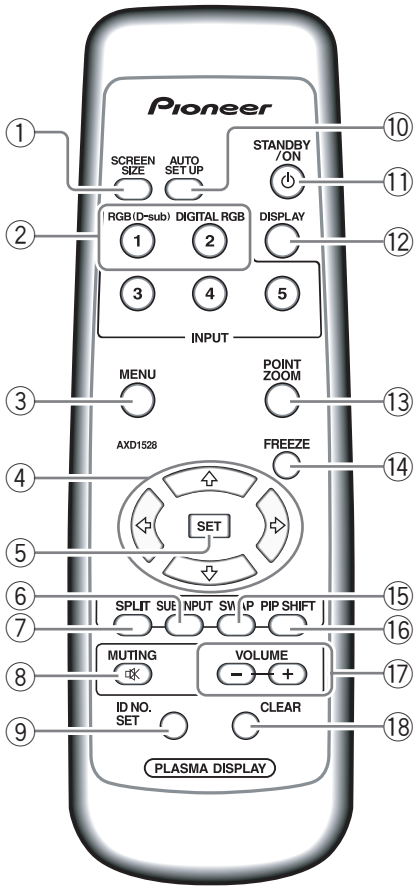
Pin No.	Signal
1	NC (not connected)
2	TxD (Transmit Data)
3	RxD (Receive Data)
4	NC (not connected)
5	GND
6	NC (not connected)
7	NC (not connected)
8	RTS (Request To Send)
9	NC (not connected)

INPUT2 (DVI-D 24 pin connector; female) pin layout



Pin No.	Signal Assignment
1	T.M.D.S. Data2–
2	T.M.D.S. Data2+
3	T.M.D.S. Data2/4 Shield
4	NC (No connection)
5	NC (No connection)
6	DDC Clock
7	DDC Data
8	NC (No connection)
9	T.M.D.S. Data1–
10	T.M.D.S. Data1+
11	T.M.D.S. Data1/3 Shield
12	NC (No connection)
13	NC (No connection)
14	+5V Power
15	GND
16	Hot Plug Detect
17	T.M.D.S. Data0 –
18	T.M.D.S. Data0 +
19	T.M.D.S. Data0/5 Shield
20	NC (No connection)
21	NC (No connection)
22	T.M.D.S. Clock Shield
23	T.M.D.S. Clock+
24	T.M.D.S. Clock–

2.5 Remote Control Unit



① **SCREEN SIZE button**
Press to select the screen size.

② **INPUT buttons**
Press to select the input.

③ **MENU button**
Press to reveal and hide the on-screen menu.

④ **ADJUST (▲/▼/►/◄) buttons**
Press to navigate menu screens and adjust various settings on the unit.

⑤ **SET button**
Press to adjust or enter various settings on the unit.

⑥ **SUB INPUT button**
Press to change subscreen inputs during multi-screen display.

⑦ **SPLIT button**
Press to switch to multi-screen display.

⑧ **MUTING button**
Press to mute the volume.

⑨ **ID NO. SET button**
Press to select which position the panel holds in a video wall.

⑩ **AUTO SET UP button**
Press to automatically set the [POSITION], [CLOCK]. and [PHASE] to optimum values when using a computer signal.

⑪ **STANDBY/ON button**
Press to activate the display or place in Standby.

⑫ **DISPLAY button**
Press to view the unit's current input and setup mode.

⑬ **POINT ZOOM button**
Press to select and enlarge a portion of the screen.

⑭ **FREEZE button**
Press to display a still image in the subscreen when the memo screen function is enabled.

⑮ **SWAP button**
Press to switch between the main screen and the subscreen during multi-screen display.

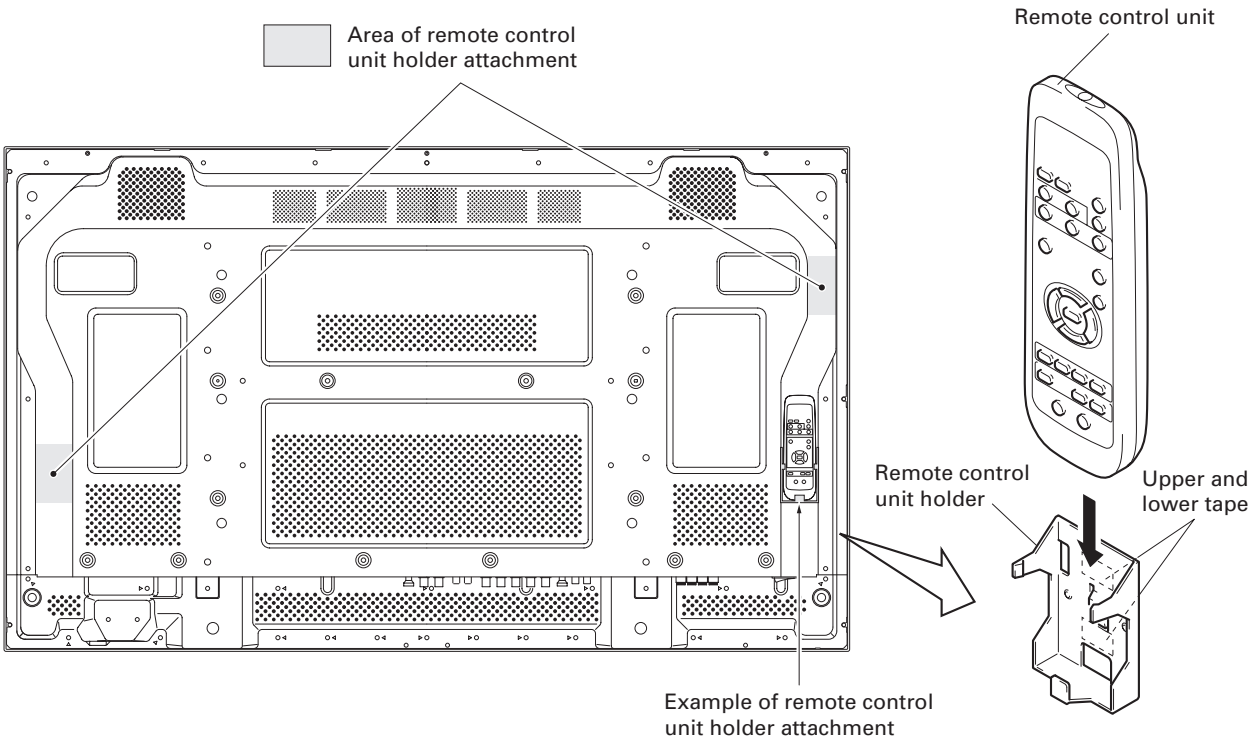
⑯ **PIP SHIFT button**
Press to move the position of the subscreen when viewing in PinP mode with multi-screen dsplay.

⑰ **VOLUME (+/–) buttons**
Press to adjust the volume.

⑱ **CLEAR button**
Press to clear for program timer and ID assignment.

2.6 Remote Control Unit Holder (PDP-427CMX only)

Peel the sticker covers from the lower and upper mounting tapes on the rear of the remote control holder. Attach it to the back of the main unit or on some other fixed surface so that it will be available for storing the remote control with the panel.


Area of remote control unit holder attachment
Remote control unit
Remote control unit holder
Upper and lower tape
Example of remote control unit holder attachment

Caution **Do not block ventilation holes with the remote control holder.**

3.1 Installation Site Requirements

If the site requires modifications or special preparations before installing the Plasma Display or its mounting hardware, obtain permission in advance from the building owner or building authorities. To ensure safety, it is also important to determine the strength of the installation site with the help of an authorized building contractor.

Safety Precautions ⚠

1) Structure of the installation site

Thoroughly study the structure of the installation site before determining the most suitable installation method. Buildings vary in structure and materials, thus the best mounting choice differs at each location. When drilling into walls, check for internal electrical wiring and hidden pipes.

2) Weight capacity of the installation site ⚠

Select a location sufficient to support the total weight of the display and mounting hardware.

3) Flat, level surfaces ⚠

Select a flat, level surface so that the mounting hardware is parallel to the proposed mounting surface.
Install the unit so that the load is evenly distributed along the ceiling or floor, as well as on mounting hardware such as from hang bolts.

4) Sufficient work space ⚠

Select a location with sufficient space for installation preperations. The panel mounting should be conducted by two or more people.

5) Nearby equipment ⚠

If air conditioning ducts, lamps, etc. are located near the installation site, dust, temperatures fluctuations, humidity, and condensation may cause problems. Please take steps to avoid this possibility.

6) Safe locations ⚠

Do not install the unit where it may be easily touched or leaned against. Avoid locations subject to high vibration or severe impacts.

7) Lighting conditions

- Check existing lighting and sunlight angles when considering an installation layout. Bright lighting can reduce the visibility and quality of a displayed image.
- In very bright surroundings, adjusting screen intensity may not result in perceptibly brighter images. Extreme intensity settings can reduce a system's service life.

8) Other installation conditions

The panel is designed for indoor use and is not suited for open-air use. Installation in locations that are even partially exposed to the elements may lead to malfunctions or breakdown. If there is a danger of being subjected to the conditions listed below, it is necessary to limit the exposure as much as possible.

- Water or other liquids and dust
- Temperature and humidity changes
- Salt-bearing wind
- Direct sunlight (avoid sites exposed to direct sunlight upon the display as this can degrade image quality)

9) Temperature and humidity conditions ⚠

- The installation site should meet the following conditions:
  - Operating temperatures: 0 °C to 40 °C (largely depending on installation conditions)
  - Operating humidity: 20 % to 80 %
  - Storage temperature: –20 °C to 60 °C
  - Storage humidity: 20 % to 90 %
  - Operating atmospheric pressure: 800 hPa to 1100 hPa
  - Storage atmospheric pressure: 700 hPa to 1114 hPa

- We discourage installing electronic products such as this unit in locations subject to high humidity. If the unit is to be installed in a location subject to relatively high humidity, observe the following:
  - Failure to install the unit in acceptable ways may result in non-warranty damages.
  - Make sure the unit is grounded.
  - Do not allow water or other liquids to enter the unit.

10) Prevent condensation

A primary problem during the winter is condensation forming on or in electronic equipment. Rapid temperature fluctuations can leave water vapor inside the unit or on the screen, degrading performance. If condensation occurs, turn the unit OFF for an hour or more then increase the room temperature gradually before turning ON the unit.
Consult Pioneer authorized dealers for assistance.

11) Power requirements ⚠

- This unit functions properly when powered at ±10 % of its rated voltage. Characteristics of power lines may effect the voltage output. If any of the following issues occur, contact an electrician to inspect the power source.
  - – Significant voltage drop between the circuit panel and the Plasma Display
  - – Significant changes in voltage when switching the display power ON or OFF
- Please allow the following margin for power consumption per unit.
  PDP-507CMX: 370 W = 370 VA
  PDP-427CMX: 320 W = 320 VA

(NOTE)

When powering up the unit, the in-rush current is approximately 30 A.

- A grounded three-core power cable is used by the Plasma Display in order to maintain its functions.
  Connect the power cord by inserting it into a grounded electrical outlet.
  When using a different power source, use a conversion plug. Insert it into a grounded electrical outlet and securely attach the ground wire.
- A leakage current within a value, stipulated by standards in each country, flows from an internal noise filter through devices installed inside switching power sources such as television sets or air-conditioners. Because these currents are added together when multiple units are connected, take steps to prevent electric shock caused by ground wires, etc. When a leakage breaker is installed in a power distribution series, choose the leakage breaker rating that is at least two times the total leakage current.
  When many devices are connected, increase the number of leakage breakers and form branches in the wiring system.

12) Effective remote control distance

The remote control of this display receives at the following angles and distances.

- Front: 8 m
- Left-right 45°: 3 m/Left-right 30°: 7 m
- Upward 30°: 3.5 m/Upward 15°: 5 m
- Downward 30°: 5 m

If other products controlled with infrared remote controls are placed nearby, remote control function may be affected. In such cases, move other devices further away from the display or contact a Pioneer-authorized dealer for assistance.

Depending on installation conditions, the remote control range may be reduced by infrared radiation emitted by the screen.

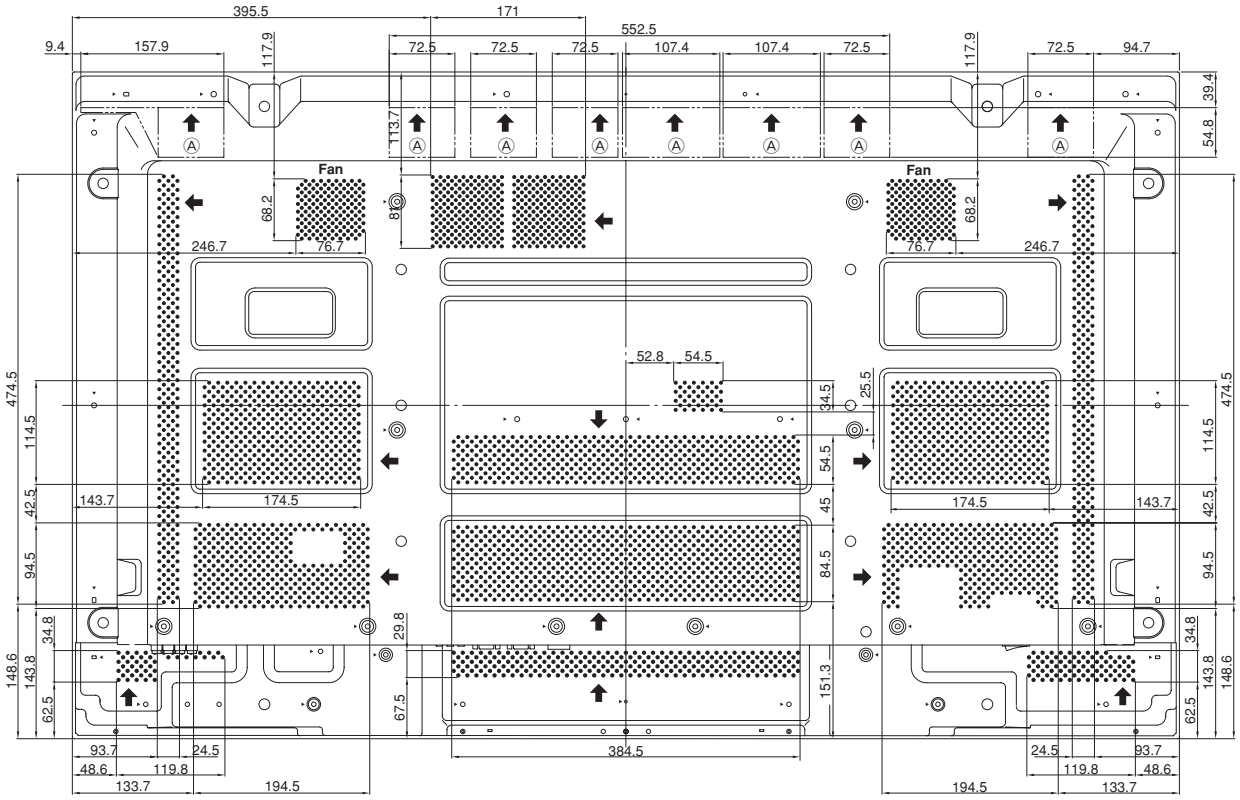
The screen's infrared intensity varies, depending upon the displayed image.

3.2 Installation Conditions (PDP-507CMX)

3.2.1 Heat dissipation

This unit has openings for effective ventilation. Vent locations are marked by arrows in the illustration below. The arrows show the direction of airflow. **To allow proper dissipation of heat from the unit, do not cover these openings.**

(Unit : mm)



In a standard installation, two fans and part Ⓐ draw hot air from the unit. All openings not assisted by fans serve as air inlets. If the unit is hung from or embedded into a wall, special operating temperature limits and other limitations may apply. Refer to section "3.5 Special Installation (PDP-507CMX)" (pg. 35) for more information.

3.2.2 Calculating heat quantity

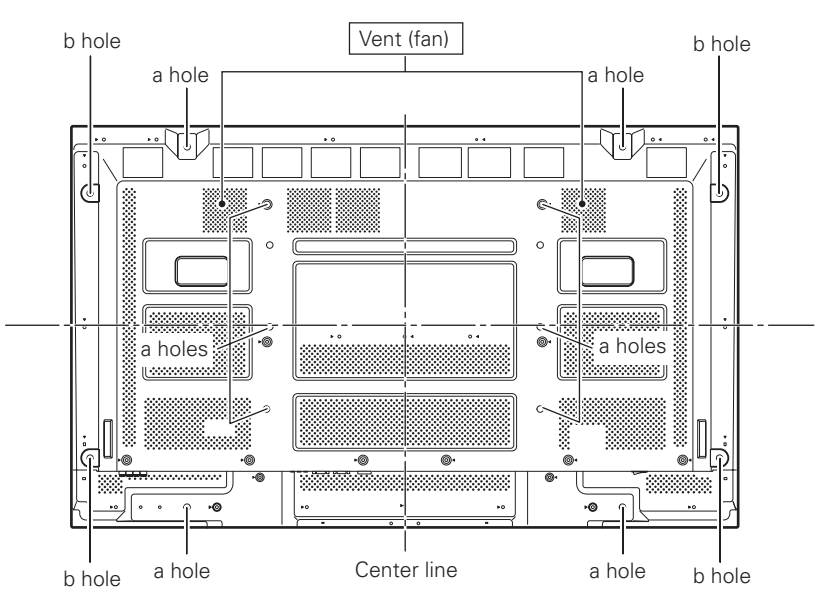
As a courtesy to our customers, we have included the power formula for calculating air conditioning needs.
For power consumption, allow 370 W = 370 VA per unit.
Since most of the power consumed is transformed into heat, power consumption may be regarded as roughly equal to generated heat.

① Conversion to calories
[W] × 0.86 = [kcal/h]
Heat generated per display: 370 W × 0.86 = 318 kcal/h

② Conversion to British Thermal Units
[W] × 3.41 = [BTU/h]
Heat generated per unit: 370 W × 3.41 = 1262 BTU/h

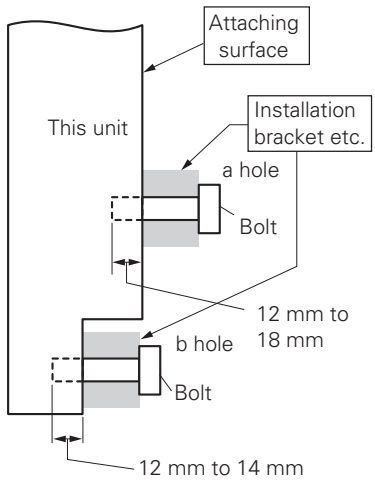
3.2.3 Product mounting holes

We recommend using mounting hardware available from Pioneer. If you use other mounting hardware, mount the hardware to the unit using the M8-bolt holes on the unit. Tighten the bolts with a torque between 50 kg/cm and 80 kg/cm. Applying a torque beyond these limits may lead to internal component failure.
Locations of usable mounting holes are shown below.



Rear view diagram

a Holes (10 places)
b Holes (4 places)



Side view diagram

⚠ Always use a minimum of 4 mounting holes that are evenly distributed on opposite sides of both the horizontal and vertical center lines.

⚠ Use bolts that can be driven 12 mm to 18 mm into holes "a" and from 12 mm to 14 mm into holes "b" as shown in the Side View above.

⚠ Do not block or cover vents on the rear panel.
Take precautions to prevent the walls from being soiled by the Plasma Display's exhaust outlets.

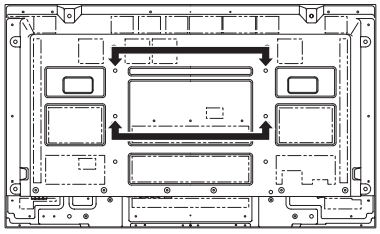
⚠ This unit incorporates glass components. Install only on flat surfaces.

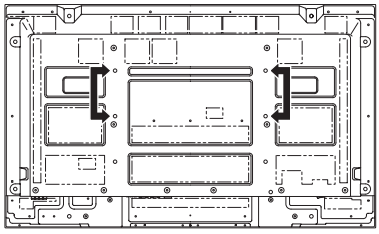
⚠ Always turn every bolt by hand two to three times then check to make sure the bolt is straight.
You may tighten using a tool but do not over-tighten the bolts.
Do not use *loctight* or similar bonding products.

⚠ Please use M8 (P=1.25) bolts. DO NOT use any other type of bolt.

This unit is designed to be mounted using four bolt holes. For additional safety, we recommend securing it at four or six points on opposite sides of the horizontal and vertical center lines, as shown in the drawing below.

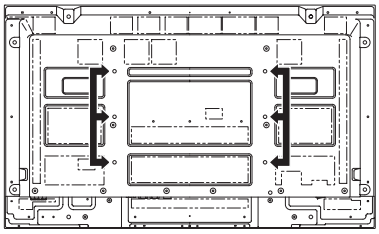
Poor methods for securing



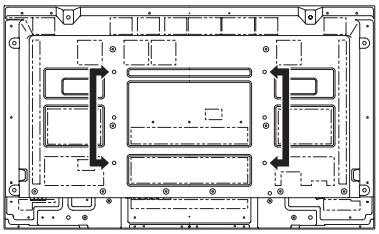


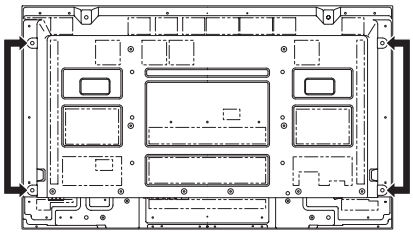
Suggested methods for securing

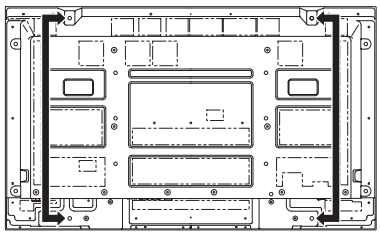
Secured at six points
*Attach using M8x6.



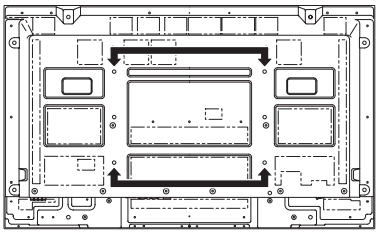
Secured at four points (with mounting hardware attached to the top and bottom)
*Attach using M8x4.

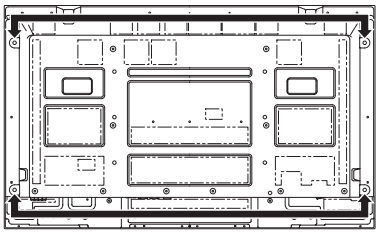


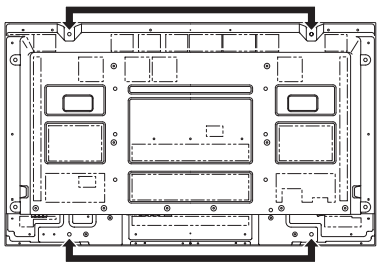




Secured at four points (with mounting hardware attached to the sides)
*Attach using M8x4.







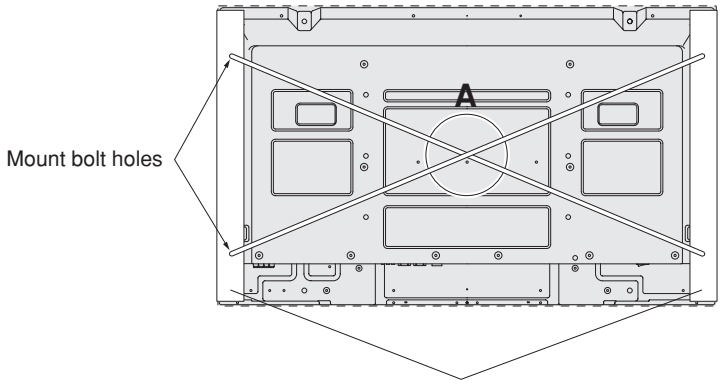
Take proper precautions to prevent pinching the power cord or signal cables.

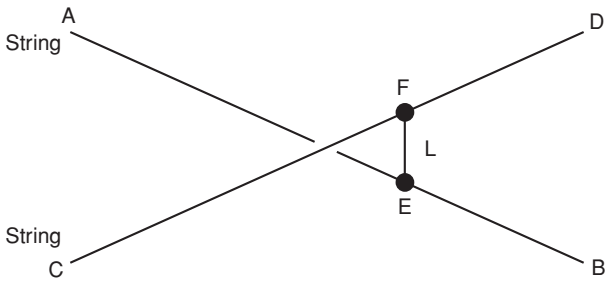
3.2.4 Mounting surface warping

The display incorporates glass. Before mounting the panel using hardware other than that provided by Pioneer, perform the following checks to confirm that the display is free from warps exceeding 1 mm*.

Regarding the 1 mm limit:
The panel frame may have a warp of up to 3 mm. If the total warp (the warp of the frame plus the warp of the mounting surface) exceeds 4 mm then the glass in the display may experience excessive stress. To ensure that the total warp is less than 4 mm, verify that the warp of the mounting surface is less than 1 mm.

① Referring to the illustration below, diagonally extend string (maximum diameter ϕ 0.1- mm) through the bolt mount openings. Strings should be completely free of slack.
② Measure the clearance (L) between the strings where they cross.
Distortion is expressed by: [Distortion] = L × 2.
③ If L is found to be 0, pass the strings through the other bolt mount openings then repeat the measurements. Any value of L greater than 0 indicates the presence of distortion. If the measured value in both cases is 0, the distortion is negligible.





Magnified view of section A

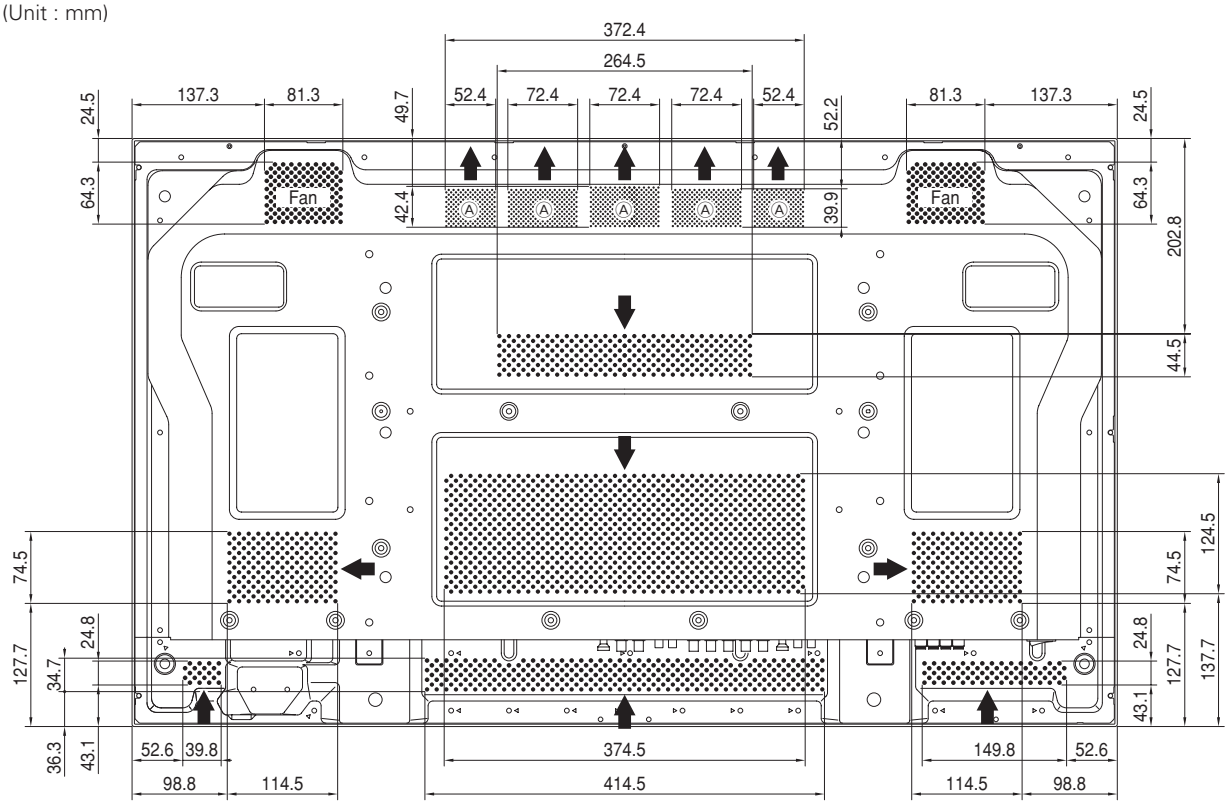
Point E is the center point of string segment A-B.
Point F is the center point of string segment C-D.
Clearance between points E and F = L
(Points E and F are shown displaced for illustrative purposes).

3.3 Installation Conditions (PDP-427CMX)

3.3.1 Heat dissipation

This unit has openings for effective ventilation. Vent locations are marked by arrows in the illustration below. The direction of the arrows shows the direction of airflow. **To allow proper dissipation of heat from the unit, do not cover any of these openings.**

(Unit : mm)



In a standard installation, two fans and part Ⓐ draw hot air from the unit. All openings not assisted by fans serve as air inlets. If the unit is hung from or embedded into a wall, special operating temperature limits and other limitations may apply. Refer to section "3.6 Special Installation (PDP-427CMX)" (pg. 55) for more information.

3.3.2 Calculating heat quantity

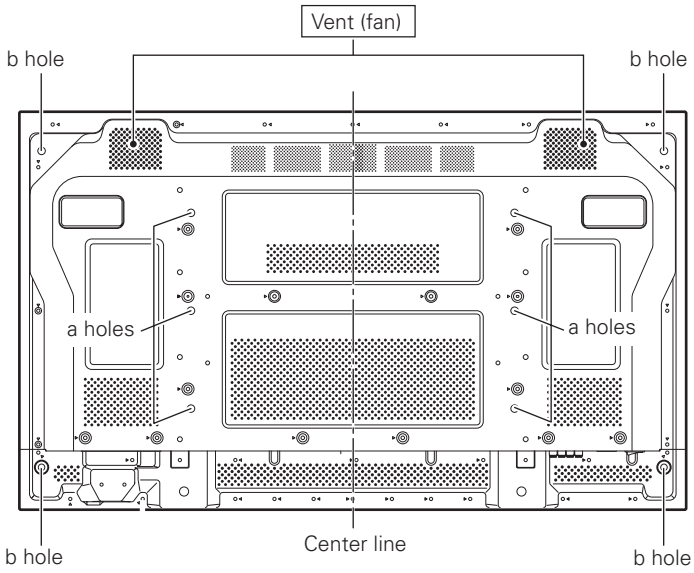
As a courtesy to our customers, we have included the power formula for calculating air conditioning needs.
For power consumption, allow 320 W = 320 VA per unit.
Since most of the power consumed is transformed into heat, power consumption may be regarded as roughly equal to generated heat.

① Conversion to calories
[W] × 0.86 = [kcal/h]
Heat generated per display: 320 W × 0.86 = 275 kcal/h

② Conversion to British Thermal Units
[W] × 3.41 = [BTU/h]
Heat generated per unit: 320 W × 3.41 = 1019 BTU/h

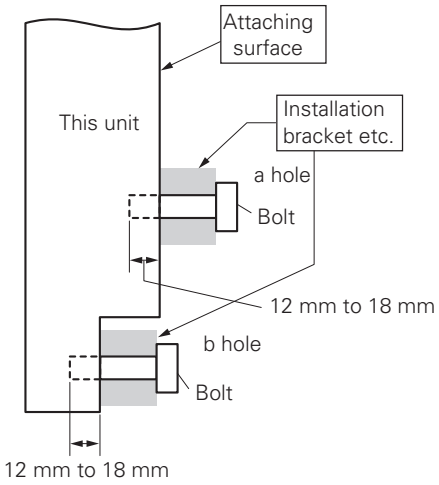
3.3.3 Product mounting holes

We recommend using mounting hardware available from Pioneer. If you use other mounting hardware, mount the hardware to the unit using the M8-bolt holes provided in the unit. Tighten the bolts with a torque between 50 kg/cm and 80 kg/cm. Applying a torque beyond these limits may lead to internal component failure.
Locations of usable mounting holes are shown below.



Rear view diagram

a Holes (6 places)
b Holes (4 places)



Side view diagram

⚠ Always use a minimum of 4 mounting holes that are evenly distributed on opposite sides of both the horizontal and vertical center lines.

⚠ Use bolts that can be driven 12 mm to 18 mm into holes "a" and from 12 mm to 14 mm into holes "b" as shown in the Side View above.

⚠ Do not block or cover vents on the rear panel.
Take precautions to prevent the walls from being soiled by the Plasma Display's exhaust outlets.

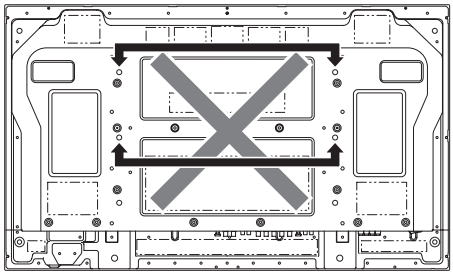
⚠ This unit incorporates glass components. Install only on flat surfaces.

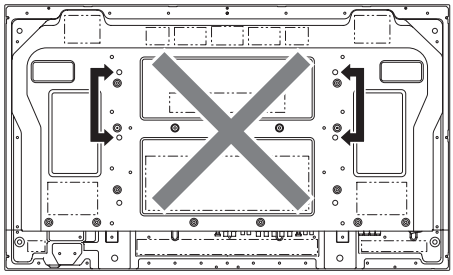
⚠ Always turn every bolt by hand two to three times then check to make sure the bolt is straight.
You may tighten using a tool but do not over-tighten the bolts.
Do not use *loctight* or similar bonding products.

⚠ Please use M8 (P=1.25) bolts. DO NOT use any other type of bolt.
The panel is attached using M8x6 or M8x4, but it can also be attached using M4x8.
For details, see the following page.

This unit is designed to be mounted using four bolt holes. For additional safety, we recommend securing it at four, six or eight points on opposite sides of the horizontal and vertical center lines, as shown in the drawing below. Methods shown with a large "X" must not be used.

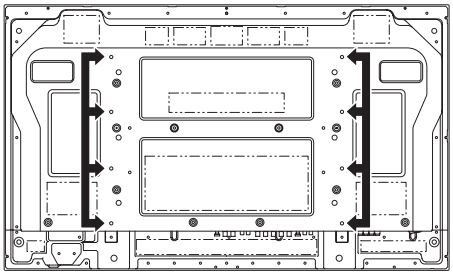
Poor methods for securing



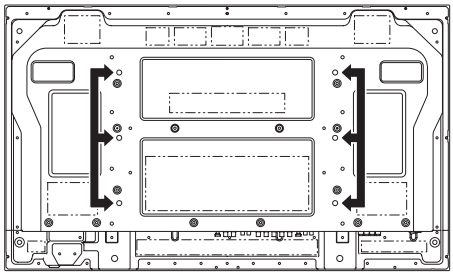


Suggested methods for securing

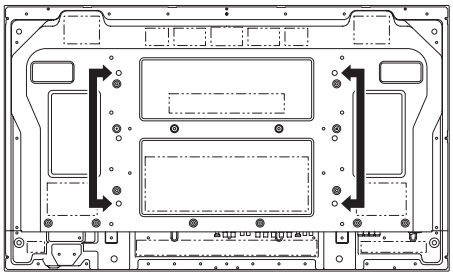
Secured at eight points
*Attach using M4x8.

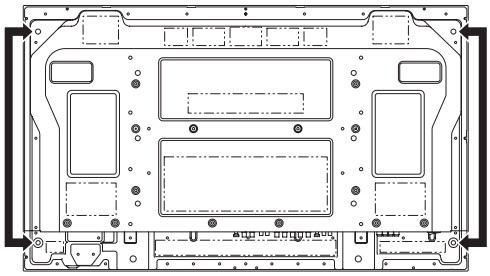


Secured at six points
*Attach using M8x6.

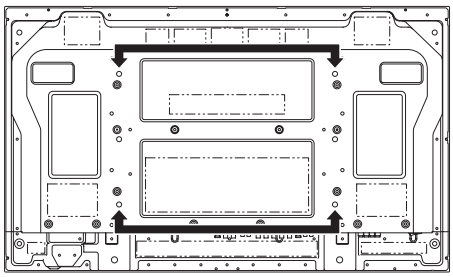


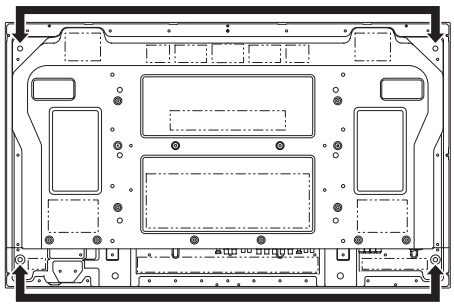
Secured at four points
*Attach using M8x4.





Secured at four points (with mounting hardware attached to the sides)
*Attach using M8x4.





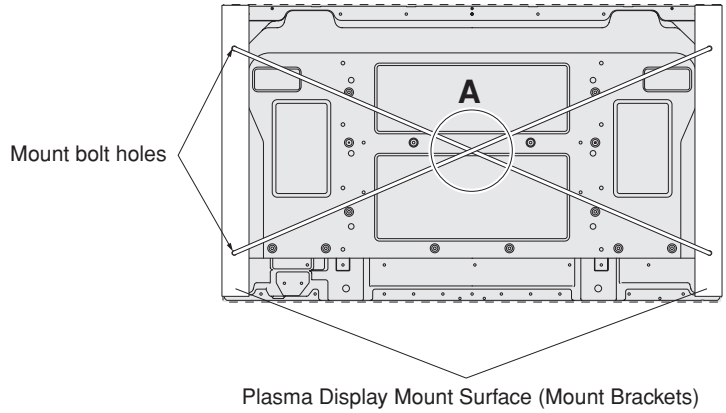
(Take proper precautions to prevent pinching the power cord or signal cables.)

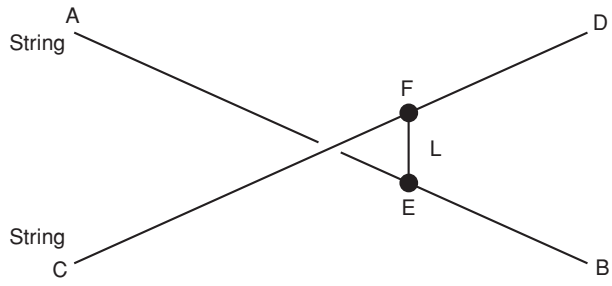
3.3.4 Mounting surface warping

The display incorporates glass. Before mounting the panel using hardware other than that provided by Pioneer, perform the following checks to confirm that the display is free from warps exceeding 1 mm*.

Regarding the 1 mm limit:
The panel frame may have a warp of up to 3 mm. If the total warp (the warp of the frame plus the warp of the mounting surface) exceeds 4 mm then the glass in the display may experience excessive stress. To ensure that the total warp is less than 4 mm, verify that the warp of the mounting surface is less than 1 mm.

① Referring to the illustration below, diagonally extend string (maximum diameter ϕ 0.1- mm) through the bolt mount openings. Strings should be completely free of slack.
② Measure the clearance (L) between the strings where they cross.
Distortion is expressed by: [Distortion] = L × 2.
③ If L is found to be 0, pass the strings through the other bolt mount openings then repeat the measurements. Any value of L greater than 0 indicates the presence of distortion. If the measured value in both cases is 0, the distortion is negligible.





Magnified view of section A

Point E is the center point of string segment A-B.
Point F is the center point of string segment C-D.
Clearance between points E and F = L
(Points E and F are shown displaced for illustrative purposes).

3.4 Installation Procedures

3.4.1 Transportation precautions

- Once the shipping container is opened, transporting the unit in its packaging should be handled by two or more people. To avoid injury or damage, do not lift the package by its packing bands.
- When transporting or storing the unit, always position it vertically - never horizontally. Horizontal transportation or storage invalidates the product warranty.
- In transportation or storage of products in original packing, never stack more than three units high.
- For transportation or storage, observe the warnings and instructions on the upper face of the carton.
- The Plasma Display is made of glass. Please handle the panel carefully to prevent it from being damaged.

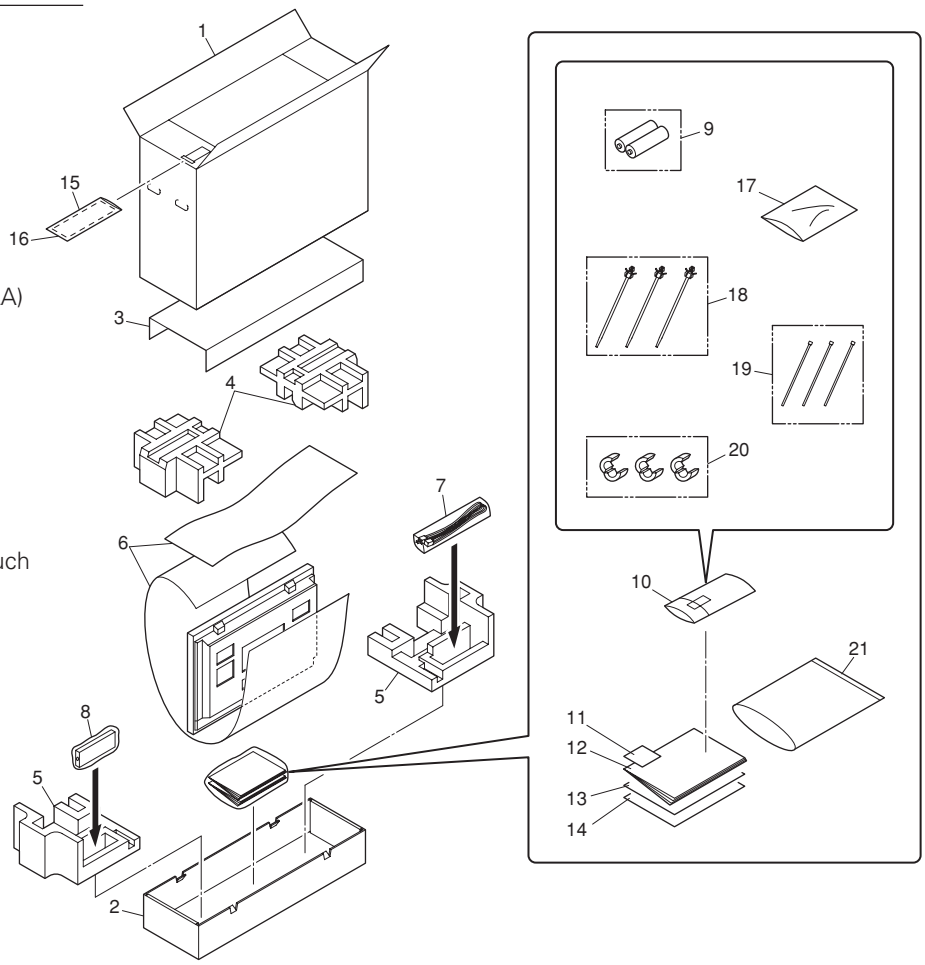
3.4.2 Unpacking

PDP-507CMX

The original packing material can be re-used to safely ship the Plasma Display. When repacking, it is important to use the material in the same way as when the unit originally shipped. Failure to pack the panel correctly can damage the Plasma Display.

1) Packing specifications; 1340 mm (W) × 900 mm (H) × 365 mm (D), 50 kg

Ref. No.	Terms
1	Upper Carton
2	Carton
3	Reinforce Pad
4	Pad
5	Pad
6	Mirror Mat
7	Power Cord
8	Remote Control Unit
9	Dry Cell Battery (R6P, AA)
10	Vinyl Bag's Assembly
11	Wiping Cloth
12	Operating Instructions
13	Caution Sheet
14	Caution Sheet
15	Warranty Card
16	Warranty Card Vinyl Pouch
17	Vinyl Bag (S)
18	Speed Clamp
19	Binder
20	Ferrite Core (S)
21	Vinyl Bag

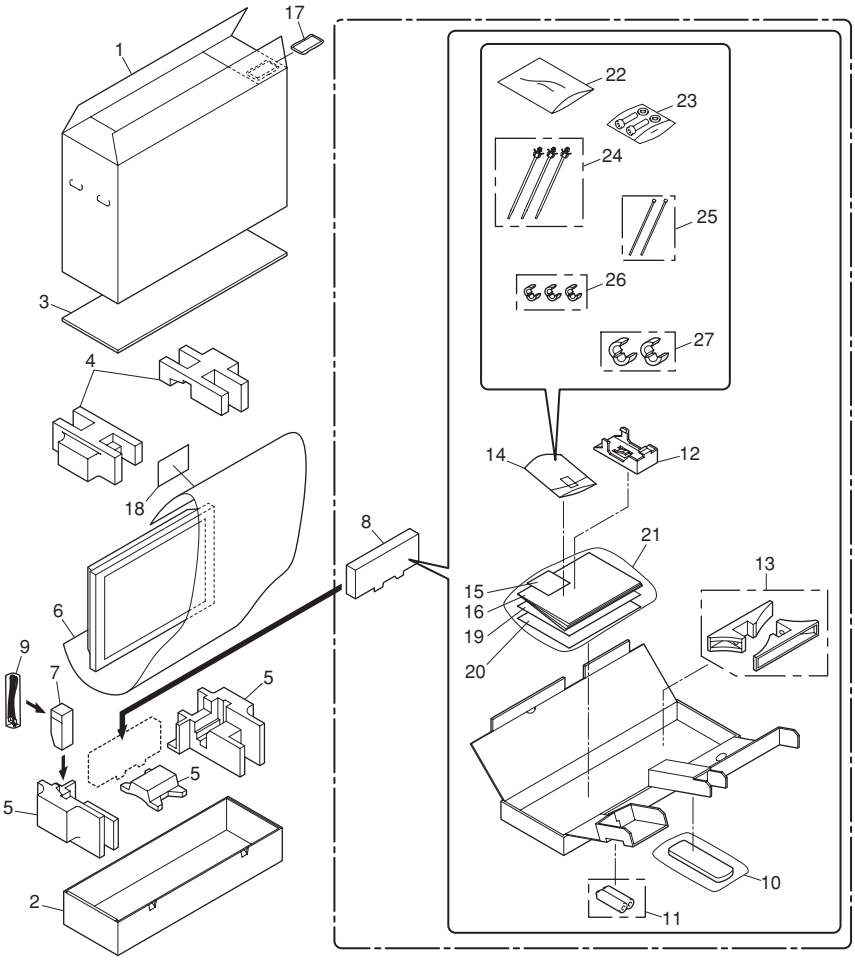


PDP-427CMX

The original packing material can be re-used to safely ship the Plasma Display. When repacking, it is important to use the material in the same way as when the unit originally shipped. Failure to pack the panel correctly can damage the Plasma Display.

1) Packing specifications; 1177 mm (W) × 767 mm (H) × 354 mm (D), 38 kg

Ref. No.	Terms
1	Upper Carton
2	Carton
3	Reinforce Pad
4	Pad
5	Pad
6	Mirror Mat
7	Power Cable Case
8	Accessory Case
9	Power Cord
10	Remote Control Unit
11	Dry Cell Battery (R6P, AA)
12	Remote Control Unit Holder
13	Display Stand
14	Vinyl Bag's Assembly
15	Wiping Cloth
16	Operating Instructions
17	Warranty Card Vinyl Pouch
18	Caution Sheet
19	Caution Sheet
20	Warranty Card
21	Vinyl Bag
22	Bag
23	Screw Set
24	Speed Clamp
25	Nylon Binder
26	Ferrite Core (S)
27	Ferrite Core (L)

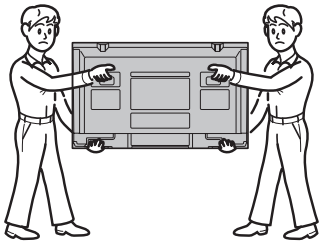


2) Unpacking procedures
   ① Remove the packing bands.
   ② Slowly lift and remove the upper carton.
   ③ Lift and remove the carton cover.
   ④ Remove the pads.
   ⑤ Remove the accessory and power cord cases.
   ⑥ Remove the unit (requires two or more people).

3) Transportation of the unpacked unit.
   If it needs to be moved, the unit should be lifted by two or more people.

⚠ Caution

- Never move the unit by dragging it along the floor.
- Move the unit slowly, taking care to prevent scraping or striking the delicate front protective panel.
- In order to prevent adhesion of dust, remove the protective film only after all work and preparations for the installation site, including clean-up following unpacking, are complete.
- When moving the display, it should always be carried by two people holding the rear handles in the manner shown.



⃠ No!

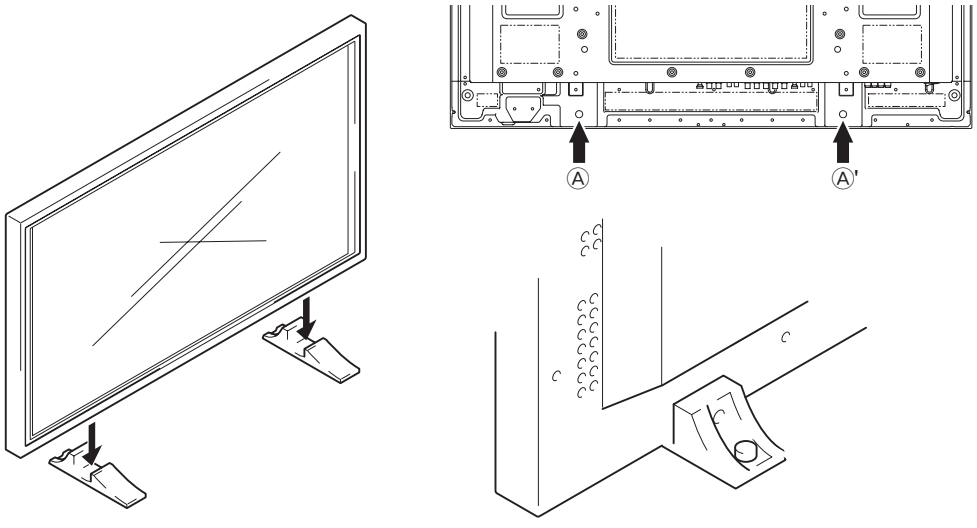
Never attempt to move the Plasma Display by holding only one of the handles.

3.4.3 Mounting on the attachment stands (PDP-427CMX only)

(See "4.3 Installation of the Attachment Stand (pg. 78)" for instructions on permanent installation.)

Insert the stand into Ⓐ and Ⓐ' on the back of the main unit and anchor it with the attached washers and bolts. After manually tightening the bolts, completely tighten them with the attached tools.
When doing this installation with the main unit on its side, align the bolts while pushing the stand.
This method should be a temporary setup pending proper installation. When installing the stand, consult "4.3 Installation of the Attachment Stand" (pg. 78) for more information.

⚠ Placing the screen on the stands is only a temporary step before proper installation. We cannot guarantee against damage if the display falls from someone bumping it while in the stands.



3.4.4 Re-packing (re-packing and re-shipping are not covered by the warranty)

If the unit needs to be re-packaged, observe the following guidelines.

- Refer to the unpacking instructions in section "3.4.2 Unpacking" (pg. 30 to 32). Pack the unit by reversing the unpacking procedure. There is a front and back to the miller mat. Place the shiny film surface facing out and the soft surface facing in towards the display glass.
- Restore all accessories to their original locations. Secure with adhesive tape to prevent damage during transportation.
- Do not re-package and ship if the packing material is damaged.

3.4.5 Wiring

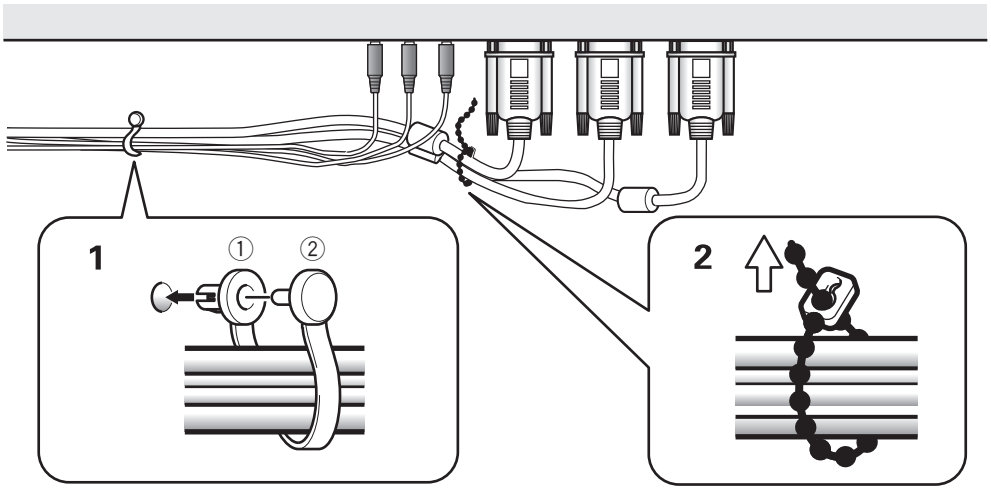
1) Connecting the power cable
   - Refer to the "**Power Cord Connection**" section in the operating instructions.
   - For power source specifications, refer to "3.1 Installation Site Requirements, Section 11) Power requirements" (pg. 21) earlier in this document.
2) Connecting signal cables
   - Refer to the operating instructions shipped with the unit for information on how to connect a PC or audio device.
   - Precautions when using long connecting signal cables
     – Use coaxial cables. For video signals use 3 C-2 V cables for lengths up to 15 meters and 5 C-2 V cables for lengths up to 30 meters. Because computer signals are more likely to degrade than video signals, even if the cable is shorter than 15 m, the use of 5 C-2 V coaxial multi-cables (5BNC) is recommended. You can also improve signal quality by minimizing cable length.
     – Video cables plugged into video inputs and outputs close to dimmers, neon signs, air-conditioning units, or cables for wired broadcasts may occasionally corrupt images.
3) Processing wires
   - For permanent or long-term installation, please select cables of the correct length and consider the entire wiring route. This is not as important for temporary or short-term installations such as at special events.
   - Arrange and secure cables so that they are not subject to pinching or physical force. For temporary installations, securing cables with string is adequate. For permanent installations, secure by more reliable means.

4) Arranging and securing cables with speed clamps and bead bands

Fasten cables using the supplied speed clamps.

⚠ **Once speed clamps are fastened, they are not easily removed.**

* As viewed from the rear of the display.



1. Organize cables together using the provided speed clamps.
Insert ① into an appropriate hole on the rear of the unit then snap ② into the back of ① to fix the clamp.

Speed clamps are designed to be difficult to undo once in place. Please attach carefully.

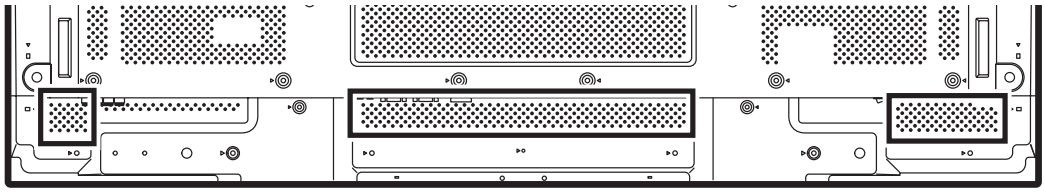
2. Bunch separated cables together and secure them with the provided bead bands.
Do not allow excessive stress to be placed on the ends of cables.

Note
Cables can be routed to the right or left.

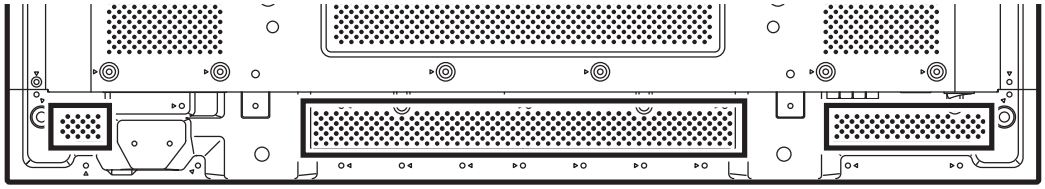
To attach the speed clamps to the main unit

Use the holes marked with the □ border shown below as needed.

* As viewed from the rear of the display. (PDP-507CMX)

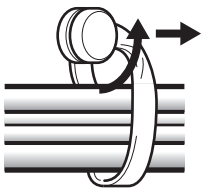


* As viewed from the rear of the display. (PDP-427CMX)



To remove speed clamps

Using pliers, twist the clamp 90° and pull outward.
In some cases, the clamp may have deteriorated over time. Removed speed clamps may not be re-usable.



3.5 Special Installation (PDP-507CMX)

The unit can be hung from or embedded in a wall. However, some installations impose additional limitations on operating temperatures and other factors.
Examine installation methods and the ambient conditions for your installation site. Refer to sections "3.1 Installation Site Requirements" (pg. 20), "3.2 Installation Conditions (PDP-507CMX)" (pg. 22), and "3.4 Installation Procedures" (pg. 30) in this manual.

Measurements discussed in this manual assume the following conditions:

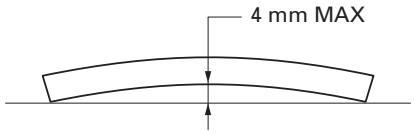
- **A 100 % white input is supplied.**
- **Sufficient aging has been completed.**

Make all measurements under identical conditions. The aging period required for correct measurement is about two and a half hours, depending on the time available at the installation site.

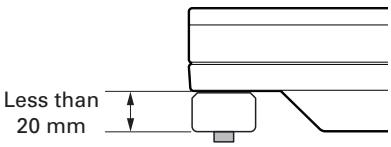
3.5.1 Mounting to fittings

Observe the following guidelines when mounting the unit to fittings.
Notes ② to ⑧ apply to all cases of mounting to fittings.

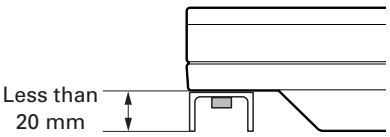
① Remove any objects from around the panel within a distance of 300 mm.
② Any unit deformation/warping occurring as a result of installation should be less than 4 mm.
③ Never block or cover vents or other openings aside from those shown as blocked in the illustrations on the following page.
④ The fittings should have a thickness of less than 20 mm.
(This limit does NOT apply to fitting in examples 1, 4, 6, and 7 on the following page.)
⑤ L-shaped fittings should have a thickness of less than 100 mm.
⑥ The strength of the fittings should be adequate to bear the weight of the display.
⑦ Take precautions to avoid sharply bending the power cable.
⑧ If necessary, remove the handles. When reinstalling the handles, completely tighten the screws for safety.



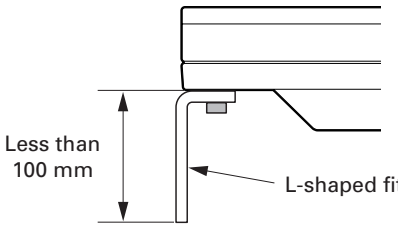
Maximum allowable deformation/ warping is 4 mm.

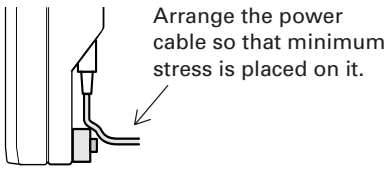


(No thickness limitations in examples 2 and 4 on the following page.)



(No thickness limitations in examples 2 and 4 on the following page.)





☆ **Operating environment for standard installation**
- Ambient Temperature: 0 °C to 40 °C (examples 1 to 4)

☆ **Operating environment for vertical installation** (*1)
- Ambient Temperature: 0 °C to 40 °C (vertical installation: examples 5 to 8)

☆ **Operating temperatures for Upside-Down Installations** (*1, *2)
- Ambient Temperature: 0 °C to 35 °C (examples 1 to 4)

The operating temperature restrictions for the speaker system (PDP-S53-LR) are the same regardless of whether installation is horizontal or vertical.

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting (pg. 235)".

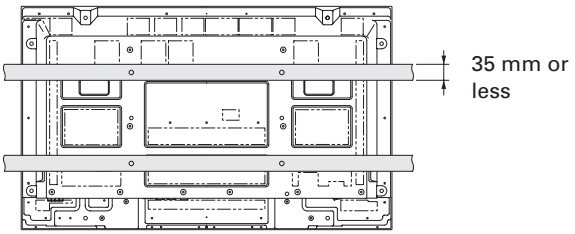
*2 When INPUT2 has been selected, use input compatible signal up to 1280x1024 (60 Hz) at ambient temperature condition of 0 °C to 35 °C.

Note

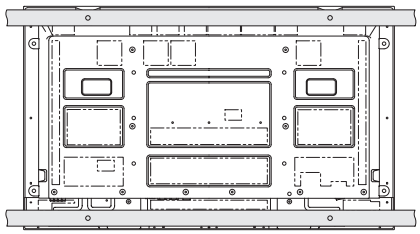
When a video card other than PDA-5003/PDA-5004 is used, the operating temperature conditions given above may vary. Check the video card operating instructions for the conditions.

Standard installation (In cases where top and bottom are reversed)

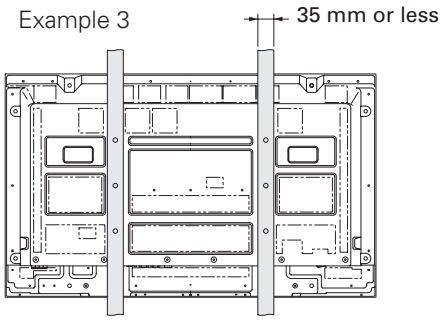
Example 1



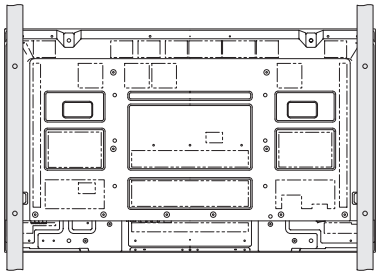
Example 2



Example 3

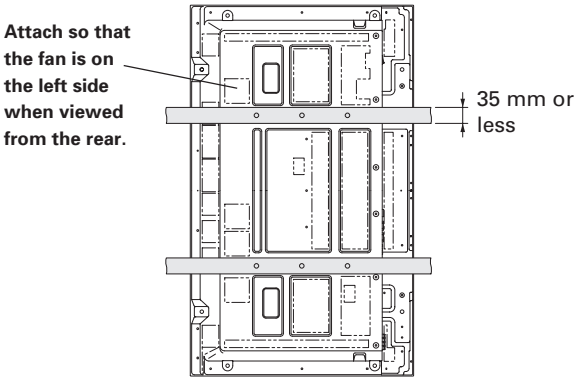


Example 4

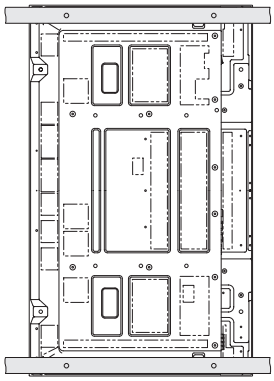


Vertical installation

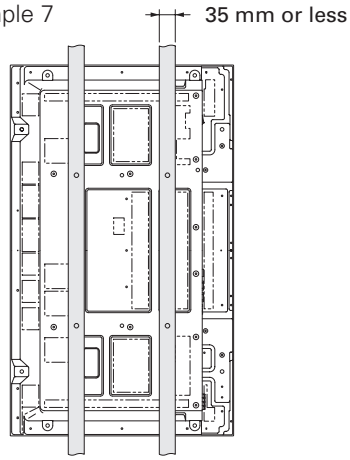
Example 5



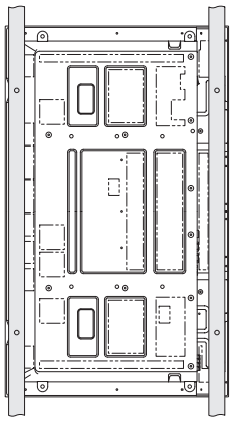
Example 6



Example 7

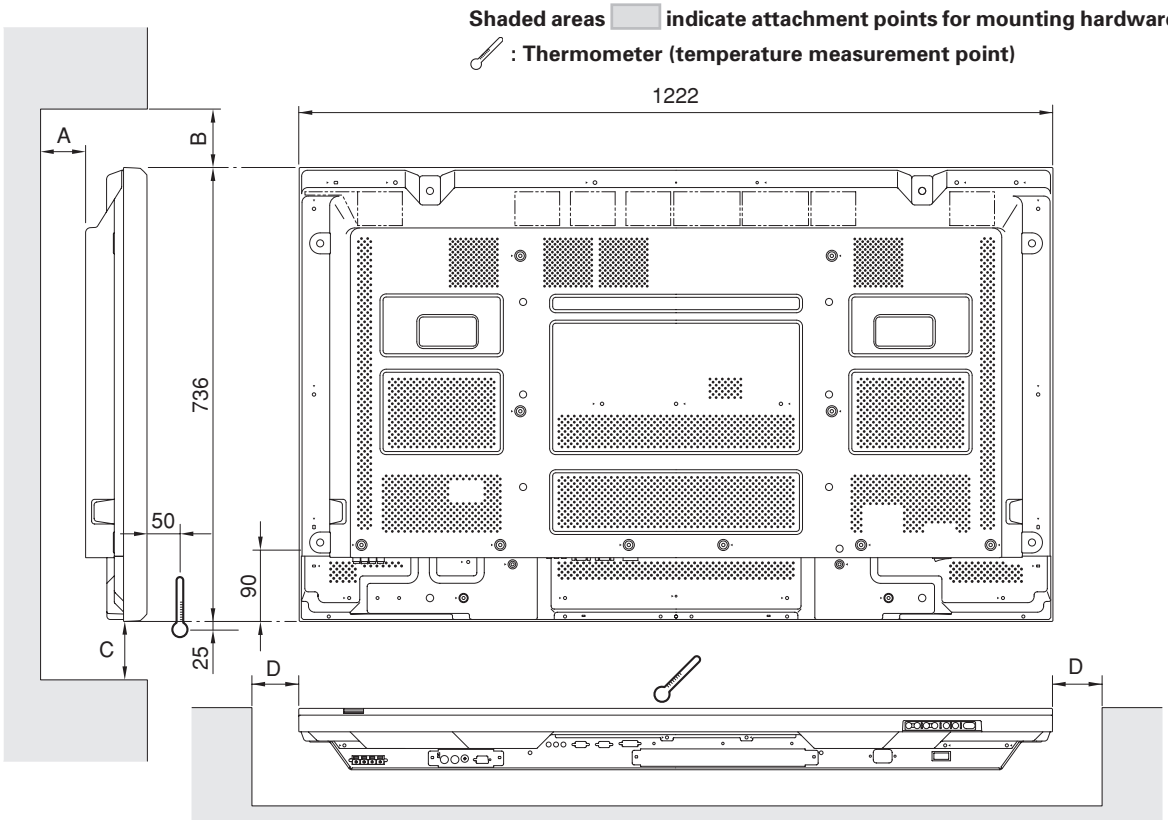


Example 8



3.5.2 Hanging on the wall

Carefully read the following imformation before attempting to hang the unit on a wall. Take note of the various limitations specified in this section. Mount the unit so that twisting, bending, or any other warping does not exceed 4 mm.



Operating temperature restrictions

☆ **Standard single-unit installation**

Distance from wall (A)	B	C	D	Ambient temperature
50 mm or less	300 mm or more	300 mm or more	300 mm or more	0 °C to 35 °C
50 mm or more	100 mm or more	50 mm or more	50 mm or more	0 °C to 40 °C

☆ **Horizontal/vertical, left/right reverse installation (Note that only Examples 2 and 3 apply in cases where the top and bottom are reversed)**

* Regardless of the distance between the Plasma Display and the wall, the unit must be installed to allow free air flow (no obstructions within a distance of 300 mm from the unit) around the panel.

Distance from wall (A)	B	C	D	Ambient temperature
50 mm or more	300 mm or more	300 mm or more	300 mm or more	0 °C to 35°C

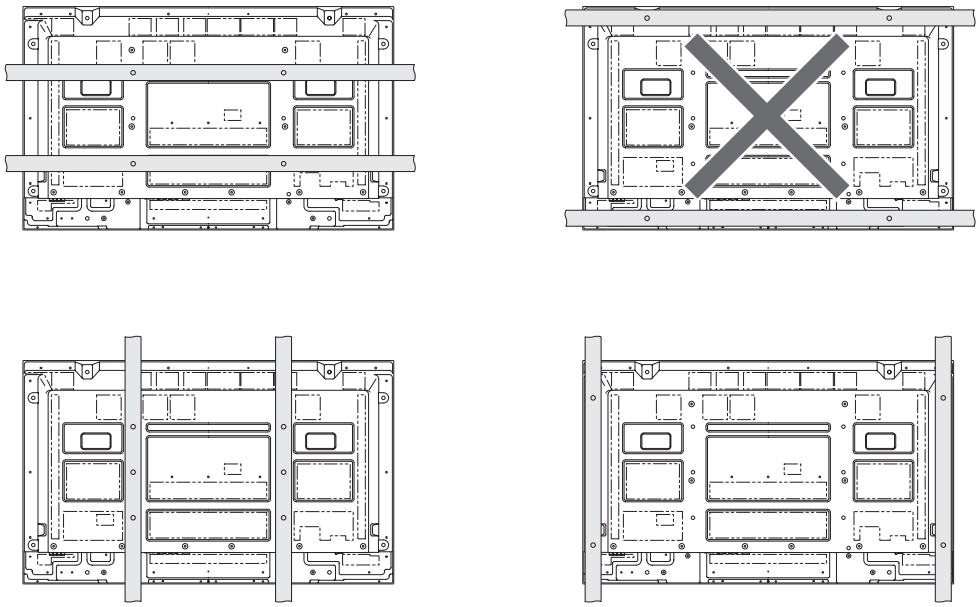
☆ **Requirements when used with PDP-S53-LR speaker system**

When installed as a single unit, all requirements are the same as those listed above for horizontal/vertical, left/right reverse installations. However, the figures listed above indicate the distance between the speakers and the wall.

Note

Different temperature restrictions apply to the PDK-5011 and PDK-WM01. Refer to "4.6 Tilt Mount Unit PDK-5011" (pg. 104) and "4.7 Wall Mount Unit PDK-WM01" (pg. 110). For a wall-mount installation, allow adequate space (a clearance of 300 mm or more) above, below, and to each side of the panel.

Methods of Securing: Basic methods of securing the panel to a wall are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The method indicated by a large "X" must not be used. Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of fixing bolts is correct.
(Also refer to "3.5.1 Mounting to fittings" (pg. 35).)

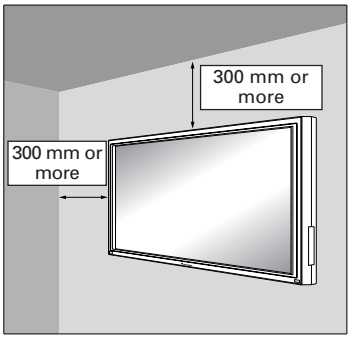


Note

Heated air is drawn from the interior of the unit by fans. Before installation, consider the heat resistance of the wall or other surface behind the unit. Exhaust temperatures can be 30 °C higher than the outside temperature.

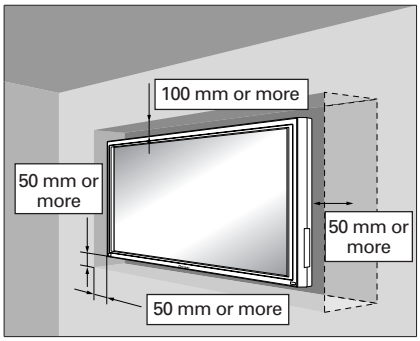
Note

For wall-mounting, do not bundle the cables in a way that block vents.



Flush-wall installation
(distance between unit and wall less than 50 mm)

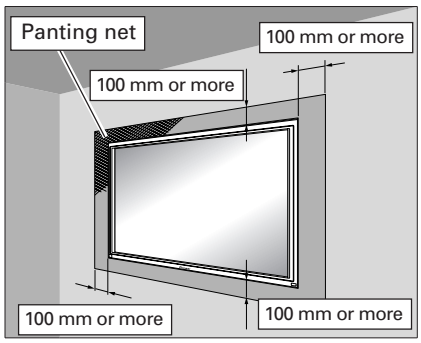
Requirements :
- Free air flow (With no obstructions within a distance of 300 mm from the unit's sides, top and bottom)
- Temperature of 0 °C to 35 °C



Ex.: Installation requirements when installed in wall recess

Wall-mounted installation
(distance between unit and wall greater than 50 mm)

Requirements :
- Free air flow (With no obstructions within a distance of 300 mm from the unit) around all four sides of the unit is not necessarily required when the unit is installed at a distance of greater than 50 millimeters away from the wall.
* However, in such cases, the unit may not be placed behind a glass panel or any other obstruction which would create an enclosed space.
- Temperature of 0 °C to 40 °C



Ex.: Installation when covered with a Panting net

Wall-embedded installation
(i.e., installation in closed space)
(distance between unit and wall greater than 50 mm)

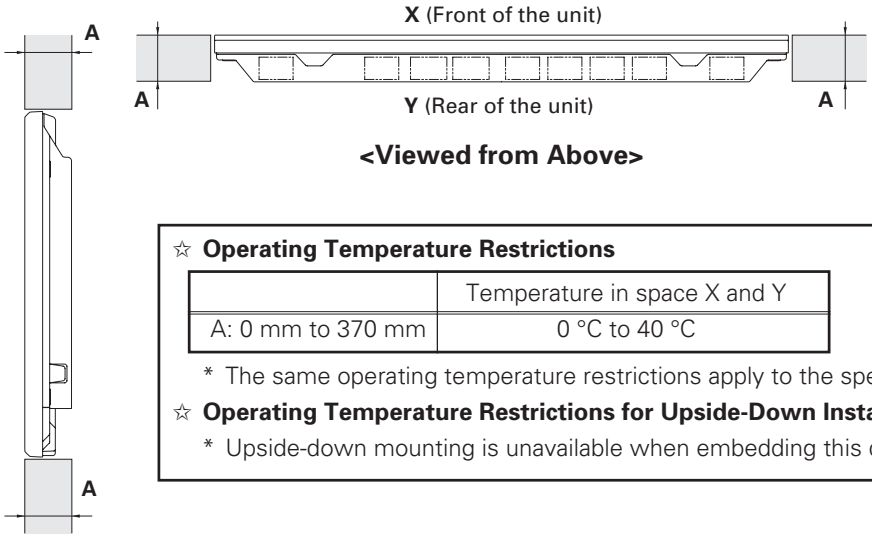
Requirements :
- See "3.5.3 Embedding in the wall" (pg. 39) for installation requirements.
- Temperature of 0 °C to 40 °C

3.5.3 Embedding in the wall

Carefully read the following imformation before trying to embed the unit in a wall. Observe all the limitations specified below.

Be sure to mount the unit so that twisting, bending, or other deformation of the unit does not exceed 4 mm.

(1) Embedding in walls with space provided behind the unit (no obstructions within a distance of 300 mm from the back surface of the unit).



<Viewed from Above>

<Viewed from the Right Side>

☆ **Operating Temperature Restrictions**

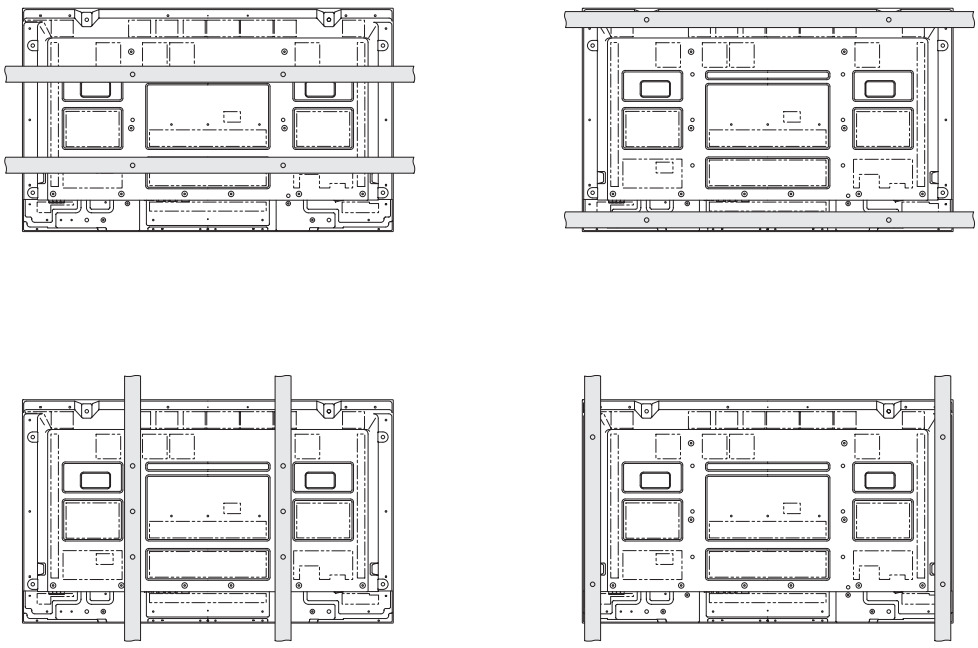
	Temperature in space X and Y
A: 0 mm to 370 mm	0 °C to 40 °C

* The same operating temperature restrictions apply to the speaker system (PDP-S53-LR).

☆ **Operating Temperature Restrictions for Upside-Down Installations**

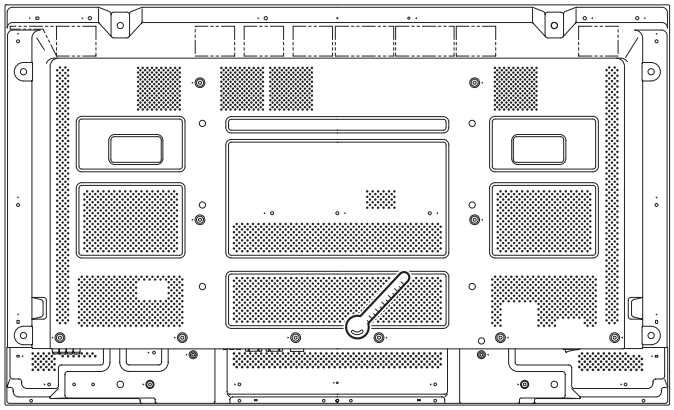
* Upside-down mounting is unavailable when embedding this device in a wall.

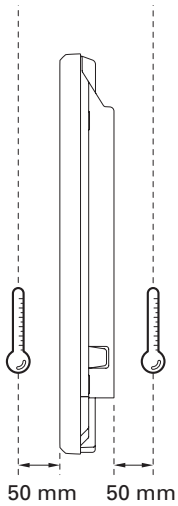
Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ .
Before attaching the unit to fittings, double-check that the thickness and height of the fittings, and the number of bolts is correct.
(Also refer to "3.5.1 Mounting to fittings" (pg. 35).)



Temperature Measurement Points (Illustration for reference purposes)

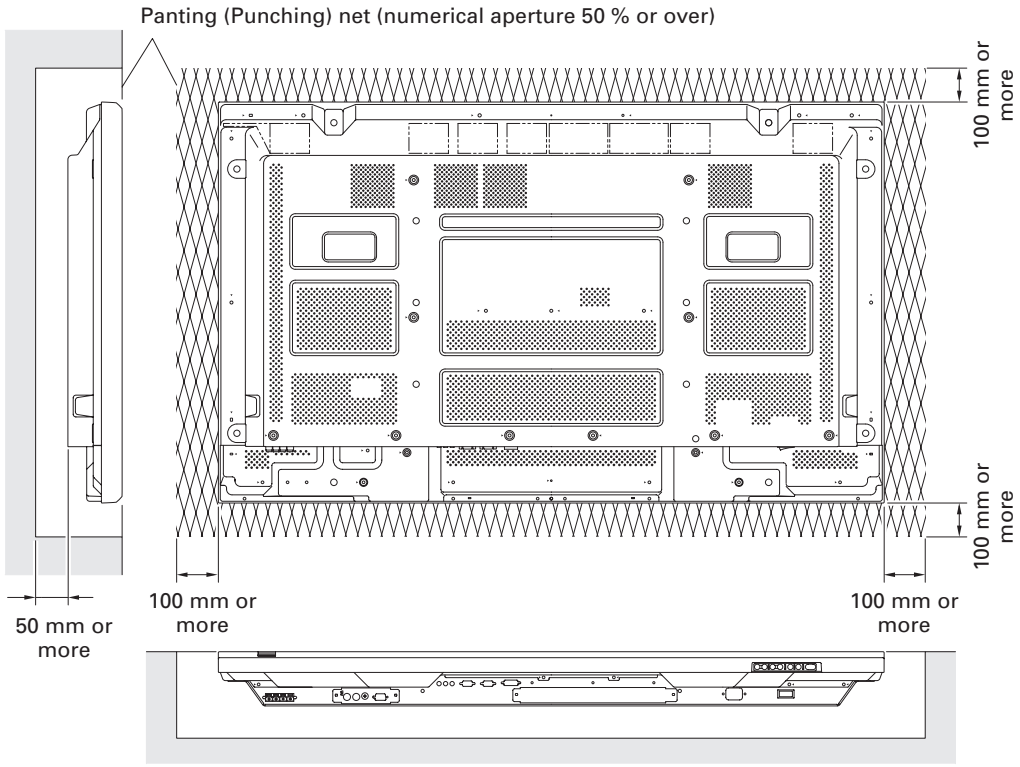
: Thermometer (temperature measurement point)





- Make measurements at a distance of 50 mm from the unit without directly subjecting the thermometer to fan exhaust.
- For spaces where temperature fluctuations are likely, gather additional measurement points for adequate data.

(2) Embedding in walls with no space provided behind the unit.



Cation : Due to possible heat issues, we do not recommend installing the panel in narrow, enclosed areas.

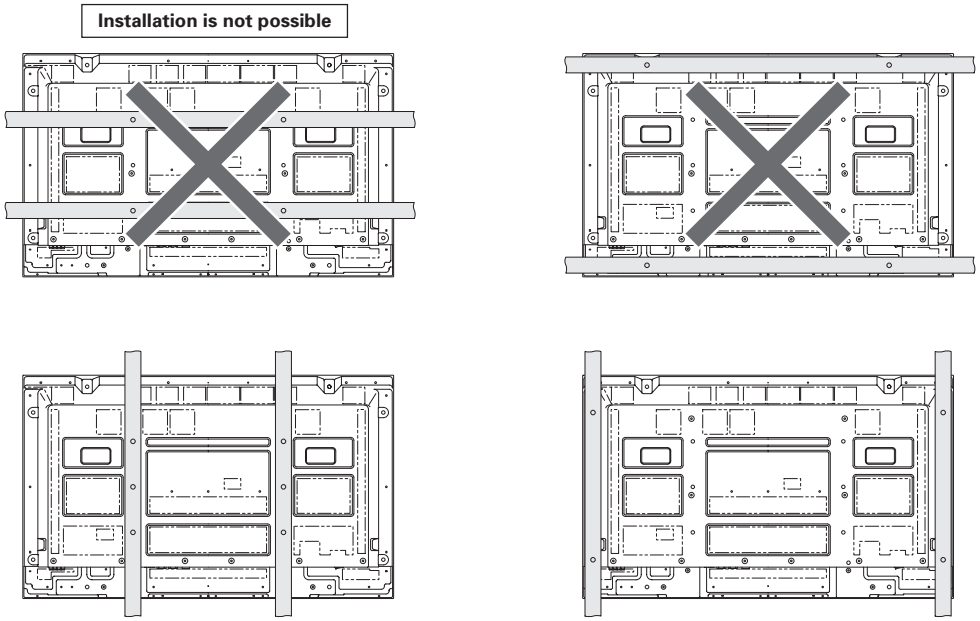
☆ **Operating Temperature Restrictions**

- Ambient temperature: 0 °C to 40 °C
- The same operating temperature restrictions apply to the speaker system (PDP-S53-LR).

☆ **Operating Temperature Restrictions for Upside-Down Installations**

* Upside-down mounting is unavailable when embedding this device in a wall.

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of bolts is correct.
(Also refer to "3.5.1 Mounting to fittings" (pg. 35).)



3.5.4 When the display is put in a box

Operating this display in confined spaces is not recommended.

- If the display is to be used in a confined space, observe the following conditions shown in the drawing below:

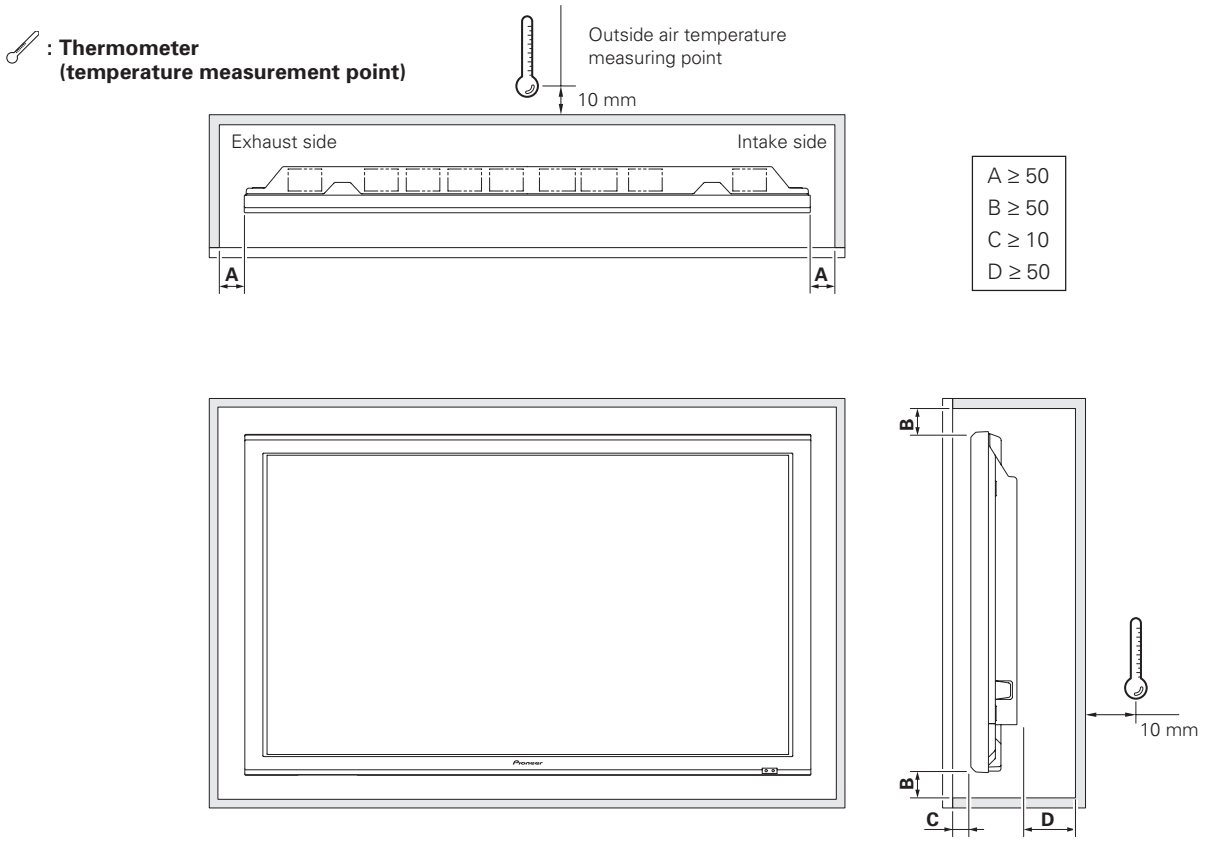
A ≥ 50
B ≥ 50
C ≥ 10
D ≥ 50

Use a mesh with aperture efficiency of 50 % or more.

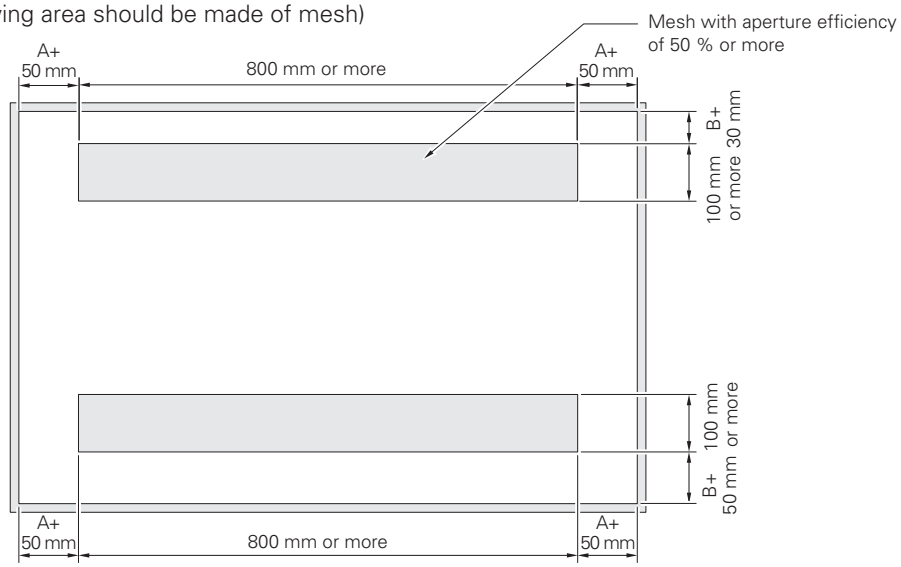
If hot air remains in the enclosed space, the temperature may rise causing a malfunction or fire. As a precaution, the inner wall should have sufficient heat resistance or fire resistance.

☆ **Usage temperature conditions (BOX air temperature)**

- Ambient temperature: 0 °C to 35 °C

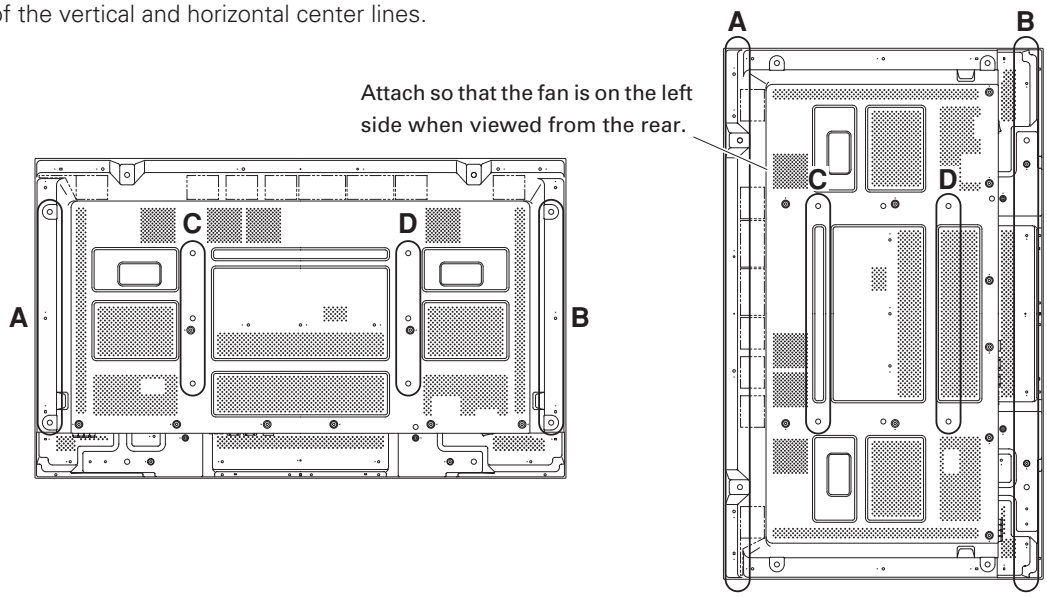


Rear view (the following area should be made of mesh)



3.5.5 Ceiling suspension (with wires)

When suspending with wire, attach the unit either at rows A and B or at rows C and D to keep it from warping. In addition, the unit must be attached at four or more points, with these points distributed symmetrically on opposite sides of the vertical and horizontal center lines.



When suspending from a ceiling with wire, use the brackets shown below to prevent concentrating loads on the upper two fixing points.

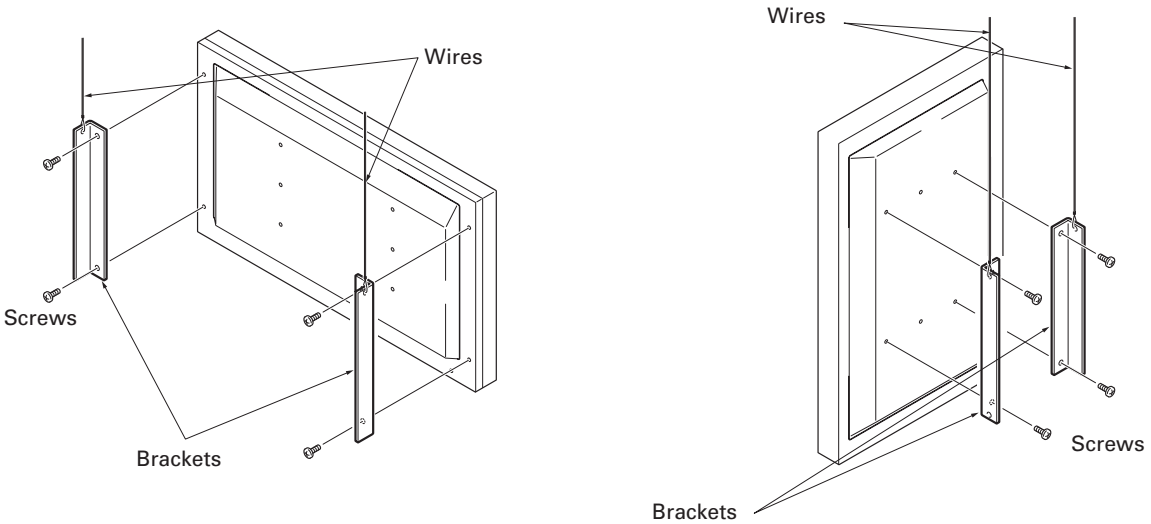
For additional safety, secure the wires to separate fittings or parts of the ceiling.

Use mounting screws of material stronger than soft steel and use hexagonal bolts.

Use wires adequate for the combined weight of the panel and the weight of the support brackets.

No!

When installing the Plasma Display, DO NOT use the handles as means of hanging the display.



☆ **Operating environment for standard installation**
- Ambient Temperature: 0 °C to 40 °C

☆ **Operating environment for vertical installation** (*1)
- Ambient Temperature: 0 °C to 40 °C

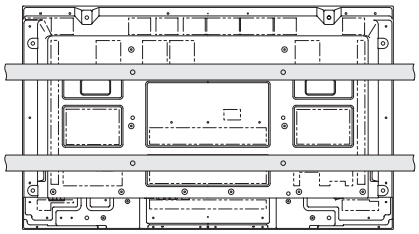
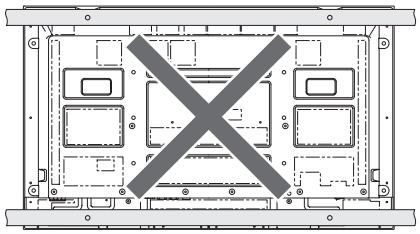
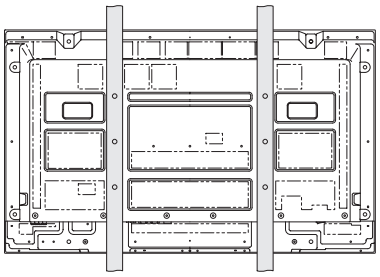
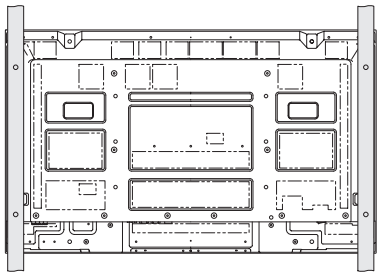
☆ **Operating temperatures for Upside-Down Installations** (*1, *2)
- Ambient Temperature: 0 °C to 35 °C

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

*2 When INPUT2 has been selected, use input compatible signal up to 1280x1024 (60 Hz) at ambient temperature condition of 0 °C to 35 °C.

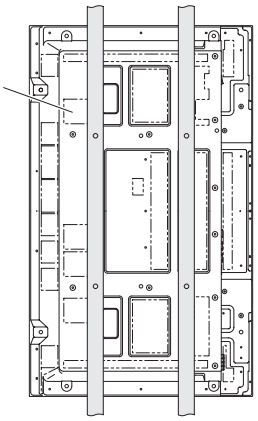
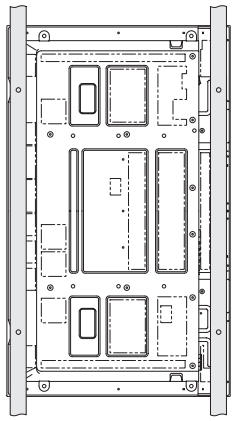
Special Installation (Ceiling suspension with wires) [507CMX]

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings, and the number of bolts is correct.
(Also refer to "3.5.1 Mounting to fittings" (pg. 35).)

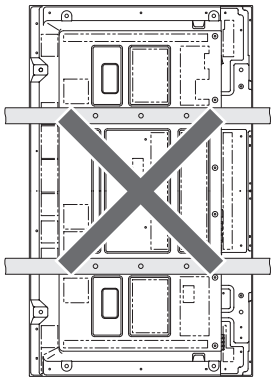





Vertical suspension

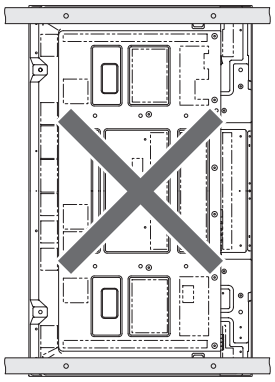
Attach so that the fan is on the left side when viewed from the rear.

Installation is not possible



Installation is not possible



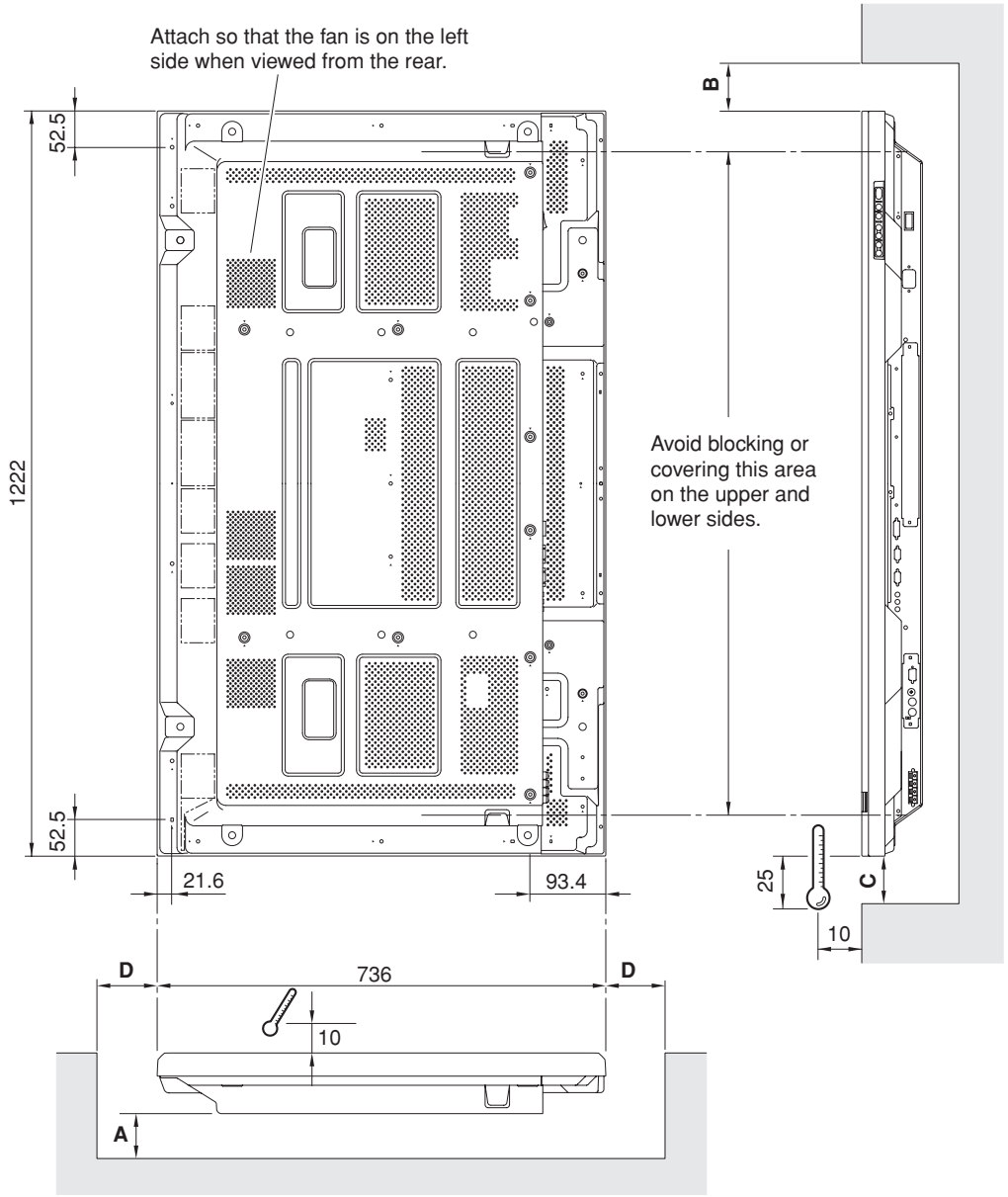
3.5.6 Hanging on the wall lengthwise

Carefully read the following imformation before attempting to mount the unit on the wall. Observe the various limitations specified below.

Be sure to mount the unit so that twisting, bending, or any other deformation does not exceed 4 mm.

Shaded areas ▭ indicate attachment points for mounting hardware.

: Thermometer (temperature measurement point)



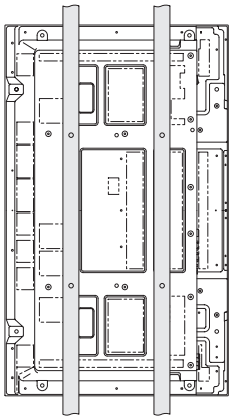
☆ **Operating Temperature Restrictions** (*1)

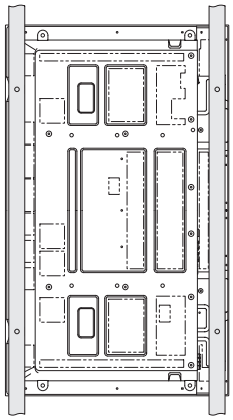
Distance from wall (A)	B	C	D	Ambient temperature
50 mm or more	100 mm or more	50 mm or more	50 mm or more	0 °C to 35 °C

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

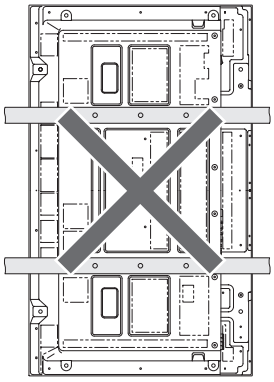
Special Installation (Hanging on the wall lengthwise) [507CMX]

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The method indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of bolts is correct.
(Also refer to "3.5.1 Mounting to fittings" (pg. 35).)

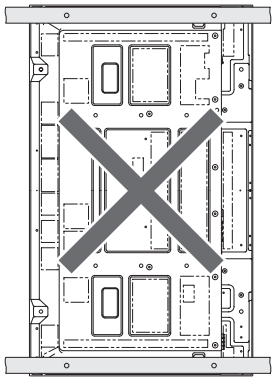




Installation is not possible



Installation is not possible



Note

Heat air is drawn from the interior of the unit by fans. Before installation, consider the heat resistance of the wall or other surface behind the unit. Exhaust temperatures can be 30 °C higher than the outside temperature.

Note

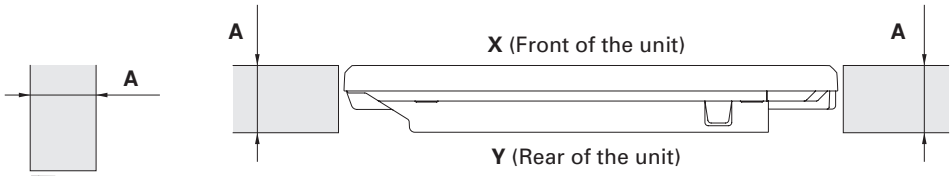
For wall-mounting, do not bundle the cables in a way that block vents.

3.5.7 Place product upright and flush into wall (embedding in the wall)

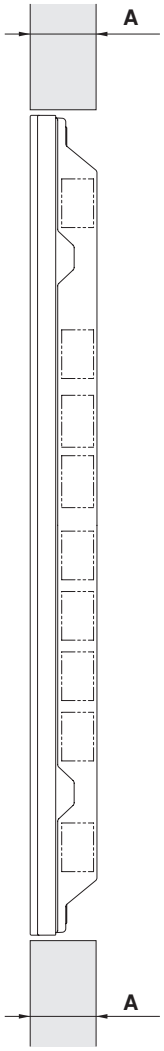
Carefully read the following instructions before trying to embed the unit in a wall. Observe all the limitations specified below.

Be sure to mount the unit so that twisting, bending, or other deformation of the unit does not exceed 4 mm.

(1) Embedding in walls with space provided behind the unit (with no obstructions within a distance of 300 mm from the back surface of the unit)



<Viewed from Above>



<Viewed from the Right Side>

☆ **Operating Temperature Restrictions** (*1)

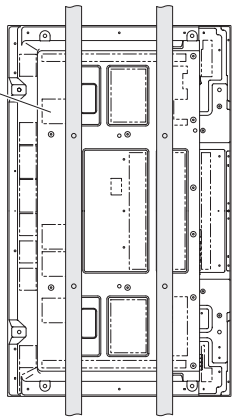
	Temperature in space X and Y
A: 0 mm to 370 mm	0 °C to 40 °C

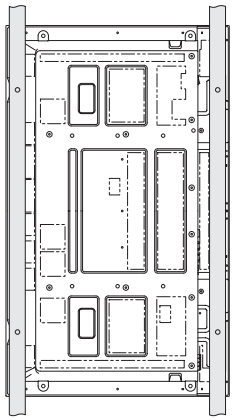
*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

Special Installation (Place product upright and flush, embedded in the wall) [507CMX]

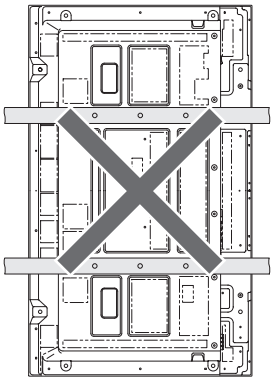
Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of fixing bolts is correct.
(Also refer to "3.5.1 Mounting to fittings" (pg. 35).)

Attach so that the fan is on the left side when viewed from the rear.

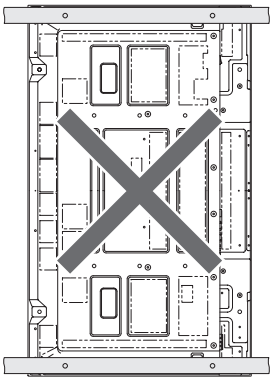




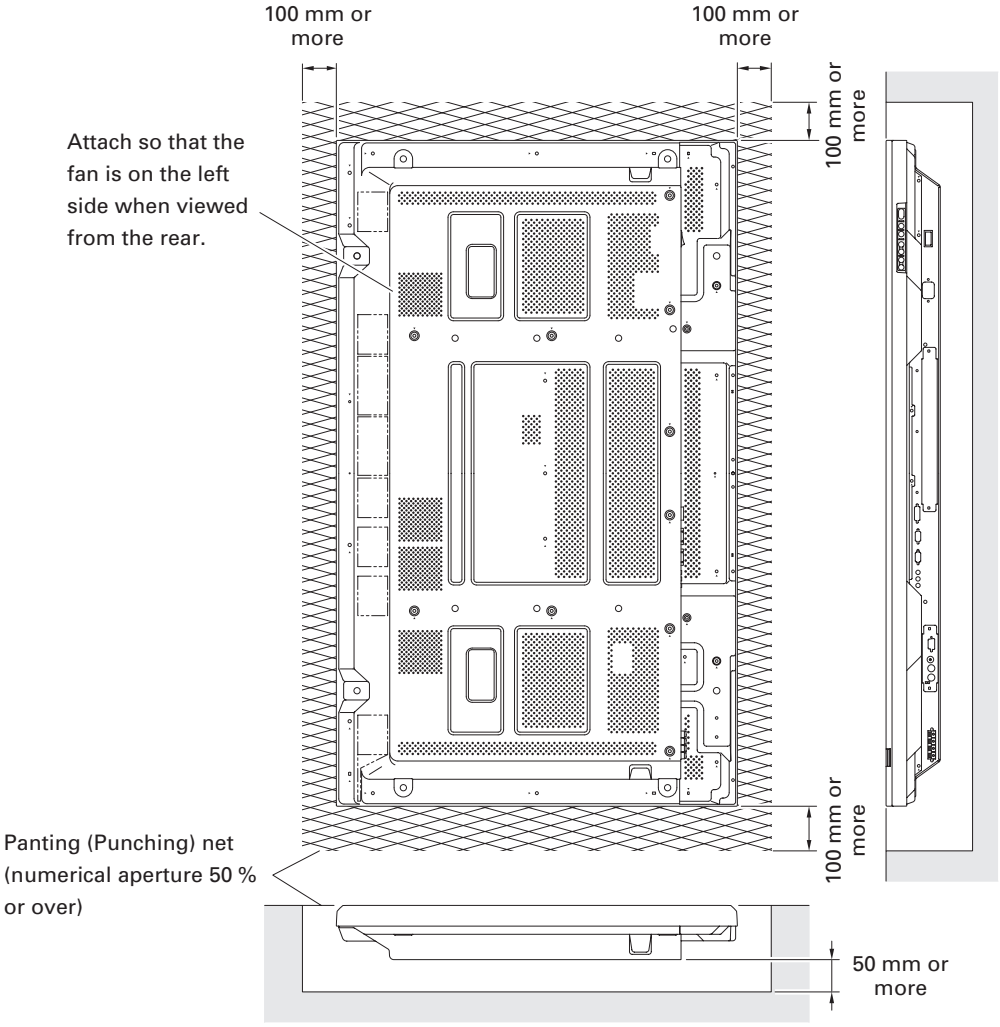
Installation is not possible



Installation is not possible



(2) Embedding in walls with no space provided behind the unit


100 mm or more
100 mm or more
100 mm or more
Attach so that the fan is on the left side when viewed from the rear.
100 mm or more
Panting (Punching) net (numerical aperture 50 % or over)
50 mm or more

Cation : Due to possible heat issues, we do not recommend installing the panel in narrow, enclosed areas.

☆ **Operating Temperature Restrictions** (*1)

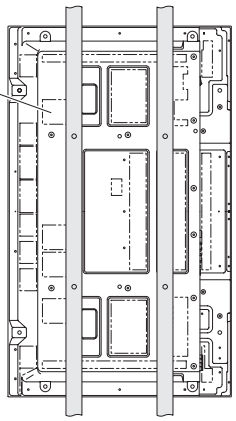
- Ambient temperature: 0 °C to 35 °C

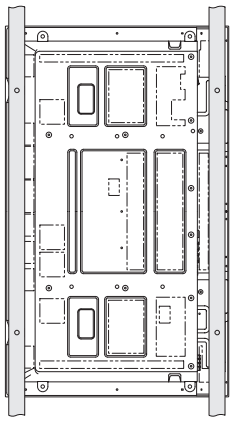
*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

Special Installation (Place product upright and flush, embedded in the wall) [507CMX]

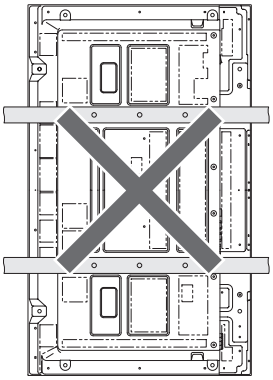
Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of bolts is correct.
(Also refer to "3.5.1 Mounting to fittings" (pg. 35).)

Attach so that the fan is on the left side when viewed from the rear.

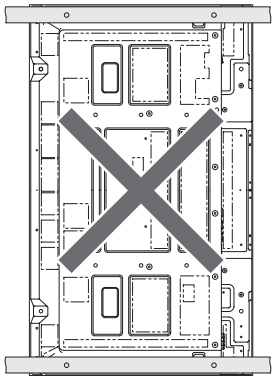




Installation is not possible

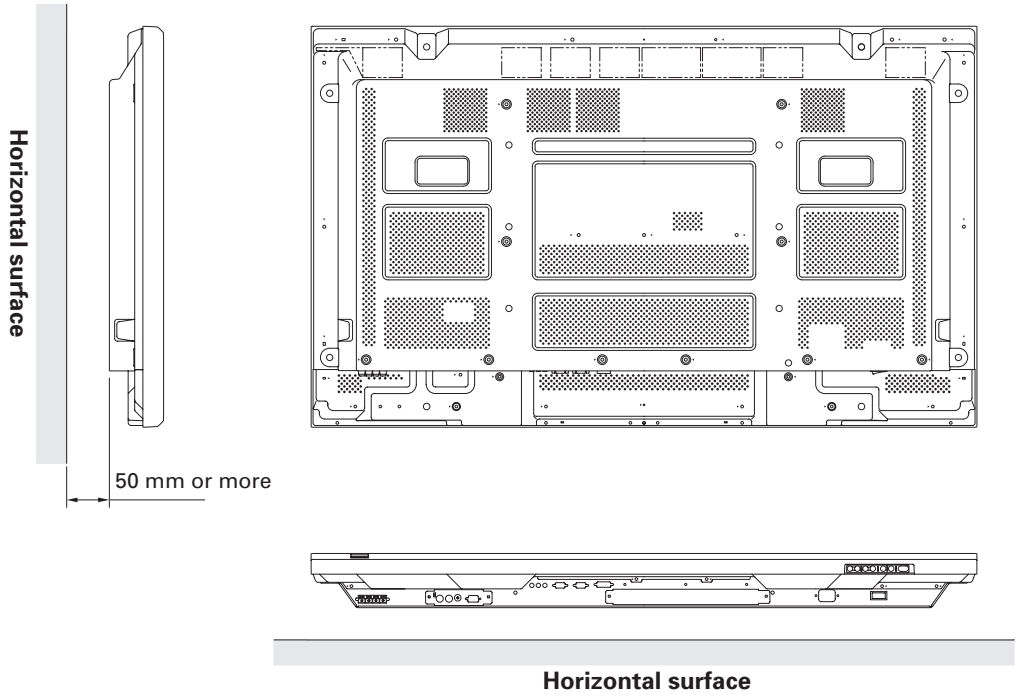


Installation is not possible



3.5.8 Installed facing upward

(1) When installed on top of a horizontal surface <an open space other than a horizontal surface>

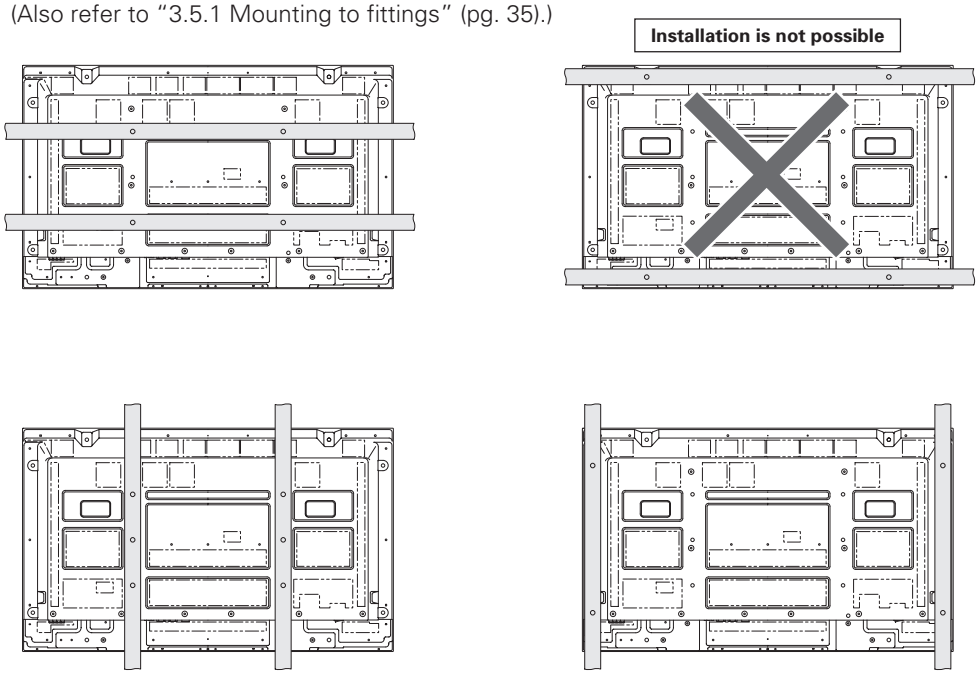


☆ **Operating Temperature Restrictions** (*1)

- Ambient temperature: 0 °C to 35 °C
- The same operating temperature restrictions apply to the speaker system (PDP-S53-LR).

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭. The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of bolts is correct.
(Also refer to "3.5.1 Mounting to fittings" (pg. 35).)



(2) When the Plasma Display is in a confined space
Operating this display in confined spaces is not recommended.

- If the display is to be used in confined spaces, observe the following conditions shown in the drawing below:
  A ≥ 50

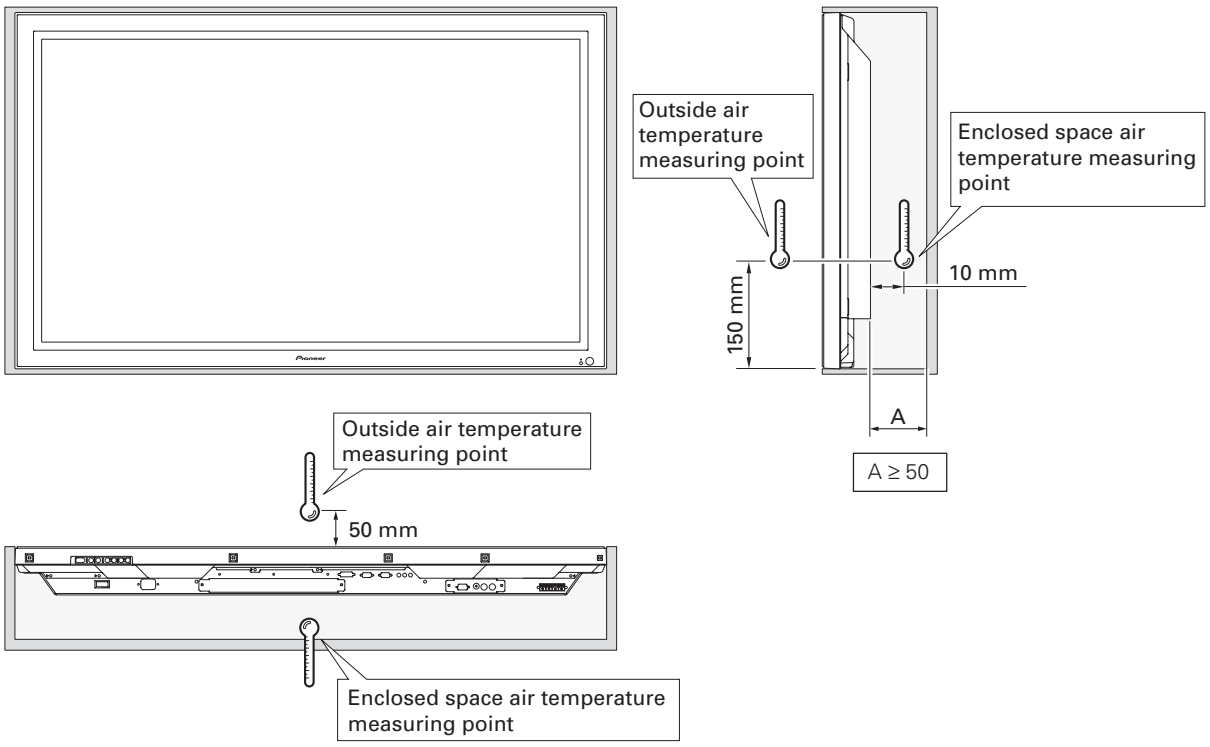
- If heat remains in the enclosed space, the temperature may rise causing a malfunction or fire. As a precaution, the inner wall should have sufficient heat resistance or fire resistance.

- Leave a space at least 10 mm wide when installing glass etc. on the front of the Plasma Display.

☆ **Usage temperature conditions** (*1)
- Ambient temperature: 0 °C to 35 °C (Outside air temperature)
- Space enclosed by the back surface of the Plasma Display: 0 °C to 35 °C (Use a fan etc. to discharge air to maintain this temperature range.)

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

: Thermometer (temperature measurement point)



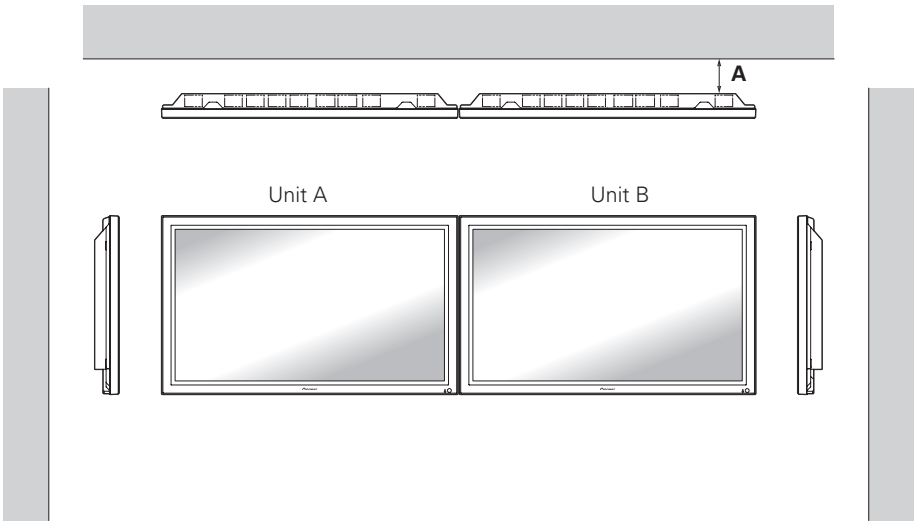
Note

When installing the Plasma Display facing upwards, do not place anything on top of it nor apply any load on it from above.

3.5.9 Horizontal connections

While the display is designed to accommodate side-by-side installations, keep in mind that specific installation configurations may affect ventilation. Observe the following requirements:

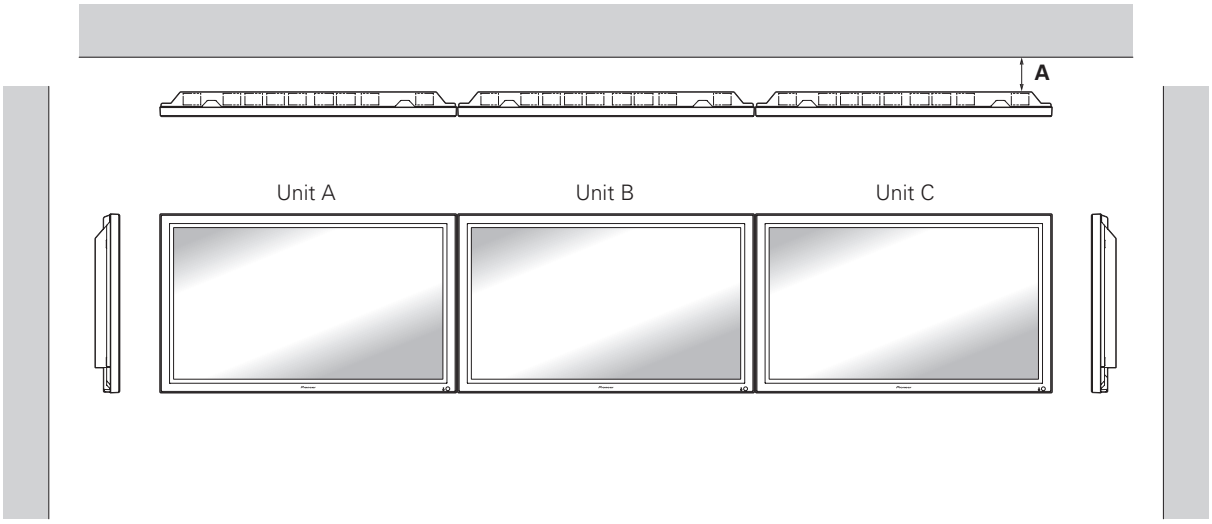
① Installation of up to two units (Horizontal connection)
The following table lists the operating temperature conditions when installing more than one panel. Use the units under conditions that keep the outside atmosphere in this range.



☆ **Operating Temperature Restrictions**

Distance from wall (A)	Ambient temperature
50 mm or more	0 °C to 40 °C

② Installing three or more units (Horizontal connection)
The following table lists the operating temperature conditions. Use the units under conditions that keep the outside atmosphere in this range.



☆ **Operating Temperature Restrictions**

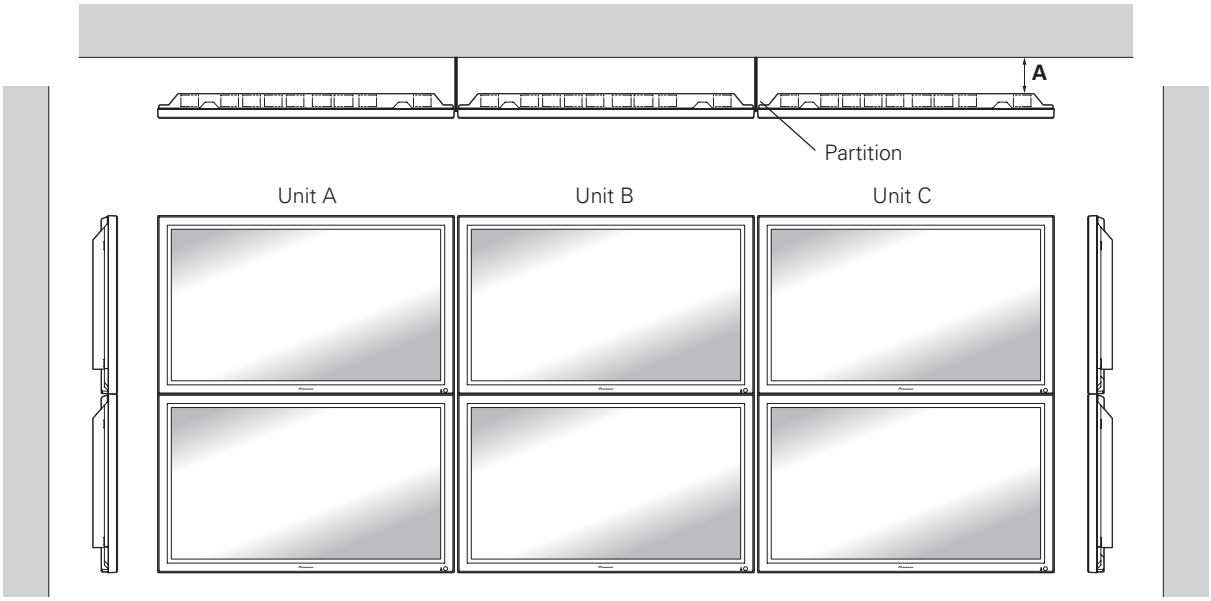
Distance from wall (A)	Ambient temperature
50 mm or more	0 °C to 40 °C

3.5.10 Multiple

While the display is designed to accommodate side-by-side installations, keep in mind that specific installation configurations may affect ventilation. Observe the following requirements:

① Installing multiple (Two vertical units)

The following table lists the operating temperature conditions when installing more than one panel. Use the units under conditions that keep the outside atmosphere in this range.



In case of lateral connections, ensure that left and right partitions are provided.

To prevent heat venting from one video wall plasma panel into another panel, each display must be oriented in the same direction.

In the above example, each panel is shown with the Pioneer logo at the bottom.

☆ **Operating Temperature Restrictions**

Distance from wall (A)	Ambient temperature
50 mm to 300 mm or less	0 °C to 35 °C
300 mm or more	0 °C to 40 °C

3.6 Special Installation (PDP-427CMX)

The unit can be hung from or embedded in a wall. However, some installations impose additional limitations on operating temperatures and other factors.
Examine installation methods and the ambient conditions for your installation site. Refer to sections "3.1 Installation Site Requirements" (pg. 20), "3.3 Installation Conditions (PDP-427CMX)" (pg. 26), and "3.4 Installation Procedures" (pg. 30) in this manual.

Measurements discussed in this manual assume the following conditions:

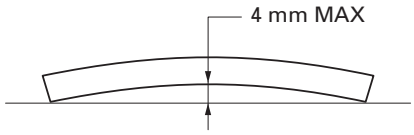
- **A 100 % white input is supplied.**
- **Sufficient aging has been completed.**

Make all measurements under identical conditions. The aging period required for correct measurement is about two and a half hours, depending on the time available at the installation site.

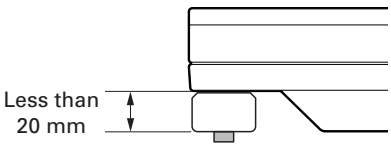
3.6.1 Mounting to fittings

Observe the following guidelines when mounting the unit to fittings.
Notes ② to ⑧ apply to all cases of mounting to fittings.

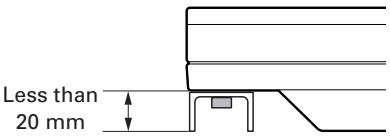
① Remove any objects from around the panel within a distance of 300 mm.
② Any unit deformation/warping occurring as a result of installation should be less than 4 mm.
③ Never block or cover vents or other openings aside from those shown as blocked in the illustrations on the following page.
④ The fittings should have a thickness of less than 20 mm.
(This limit does NOT apply to fitting in examples 1, 3, 5, and 6 on the following page.)
⑤ L-shaped fittings should have a thickness of less than 100 mm.
⑥ The strength of the fittings should be adequate to bear the weight of the display.
⑦ Take precautions to avoid sharply bending the power cable.
⑧ If necessary, remove the handles. When reinstalling the handles, completely tighten the screws for safety.



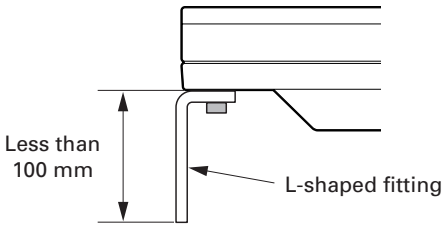
Maximum allowable deformation/ warping is 4 mm.

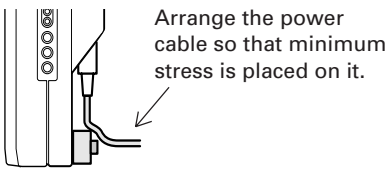


(No thickness limitations in examples 2 and 4 on the following page.)



(No thickness limitations in examples 2 and 4 on the following page.)





☆ **Operating environment for standard installation**
- Ambient Temperature: 0 °C to 40 °C (examples 1 to 3)

☆ **Operating environment for vertical installation** (*1, *2)
- Ambient Temperature: 0 °C to 40 °C (vertical installation: examples 4 to 6)

☆ **Operating temperatures for Upside-Down Installations** (*1, *2)
- Ambient Temperature: 0 °C to 40 °C (examples 1 to 3)

The operating temperature restrictions for the speaker system (PDP-S56-LR) are the same regardless of whether installation is horizontal or vertical.

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting (pg. 235)".

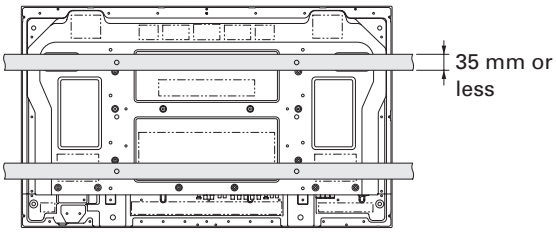
*2 When INPUT2 has been selected, use input compatible signal up to 1280x1024 (60 Hz) at ambient temperature condition of 0 °C to 35 °C.

Note

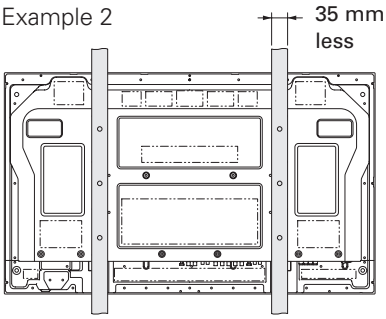
When a video card other than PDA-5003/PDA-5004 is used, the operating temperature conditions given above may vary. Check the video card operating instructions for the conditions.

Standard installation (In cases where top and bottom are reversed)

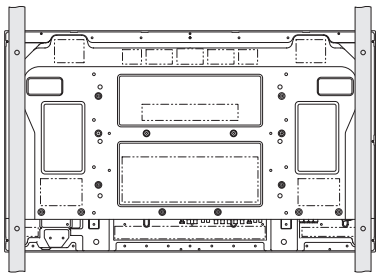
Example 1



Example 2

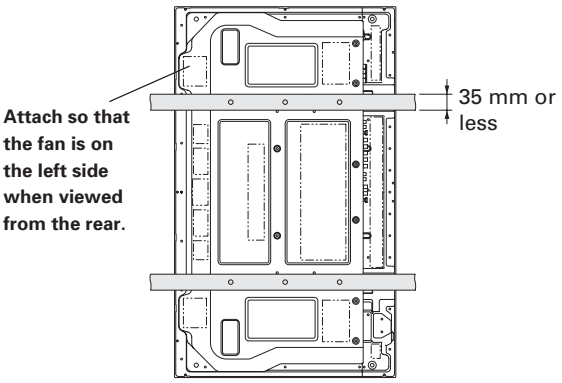


Example 3

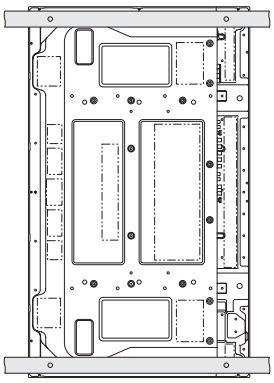


Vertical installation

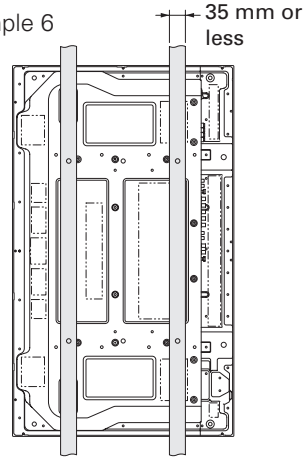
Example 4



Example 5

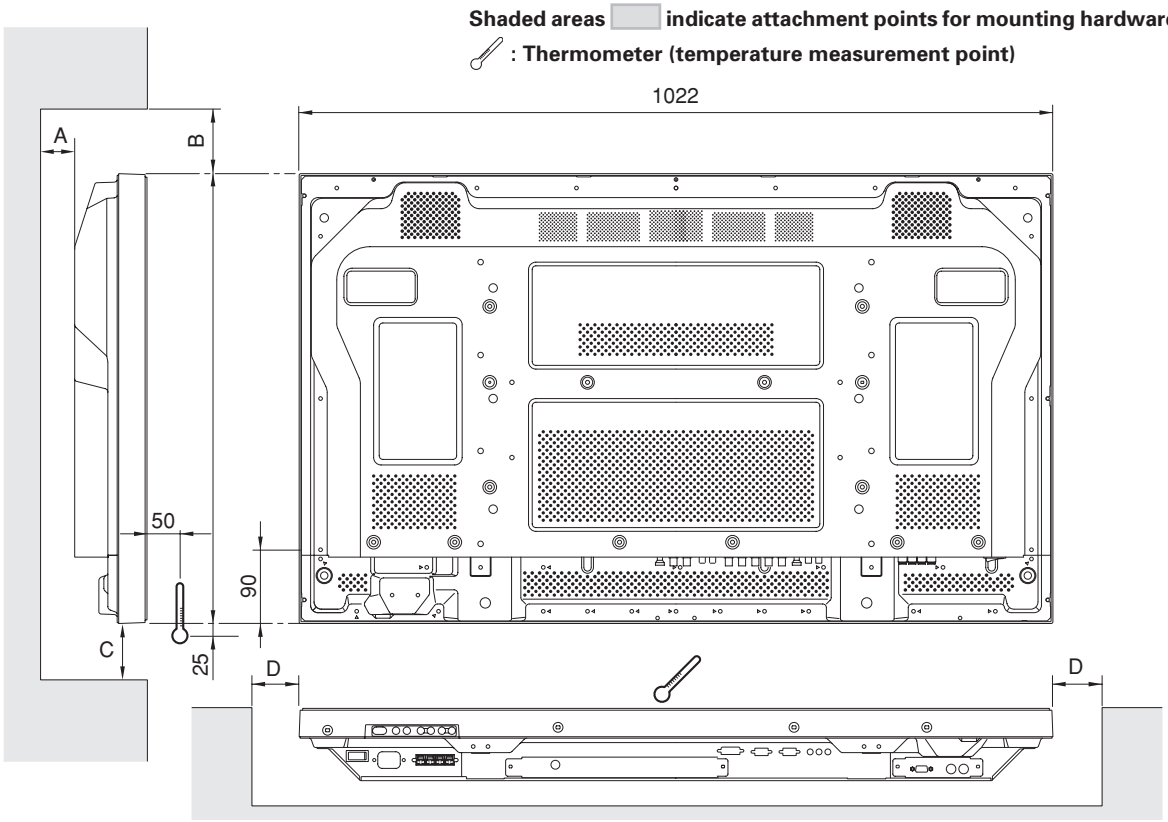


Example 6



3.6.2 Hanging on the wall

Carefully read the following imformation before attempting to hang the unit on a wall. Take note of the various limitations specified in this section. Mount the unit so that twisting, bending, or any other warping does not exceed 4 mm.



Operating temperature restrictions

☆ **Standard single-unit installation**

Distance from wall (A)	B	C	D	Ambient temperature
50 mm or less	300 mm or more	300 mm or more	300 mm or more	0 °C to 35 °C
50 mm or more	100 mm or more	50 mm or more	50 mm or more	0 °C to 40 °C

☆ **Horizontal/vertical, left/right reverse installation (Note that only Examples 2 and 3 apply in cases where the top and bottom are reversed)**

* Regardless of the distance between the Plasma Display and the wall, the unit must be installed to allow free air flow (no obstructions within a distance of 300 mm from the unit) around the panel.

Distance from wall (A)	B	C	D	Ambient temperature
50 mm or more	300 mm or more	300 mm or more	300 mm or more	0 °C to 35°C

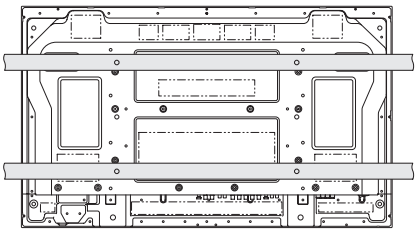
☆ **Requirements when used with PDP-S56-LR speaker system**

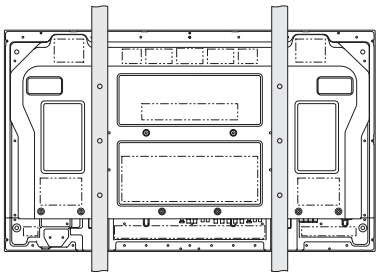
When installed as a single unit, all requirements are the same as those listed above for horizontal/vertical, left/right reverse installations. However, the figures listed above indicate the distance between the speakers and the wall.

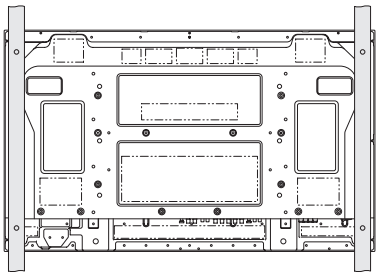
Note

Different temperature restrictions apply to the PDK-5011 and PDK-WM01. Refer to "4.6 Tilt Mount Unit" (pg. 104) and "4.7 Wall Mount Unit" (pg. 110). For a wall-mount installation, allow adequate space (a clearance of 300 mm or more) above, below, and to each side of the panel.

Methods of Securing: Basic methods of securing the panel to a wall are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The method indicated by a large "X" must not be used. Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of fixing bolts is correct.
(Also refer to "3.6.1 Mounting to fittings" (pg. 55).)





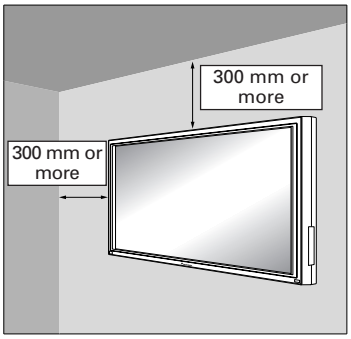


Note

Heated air is drawn from the interior of the unit by fans. Before installation, consider the heat resistance of the wall or other surface behind the unit. Exhaust temperatures can be 30 °C higher than the outside temperature.

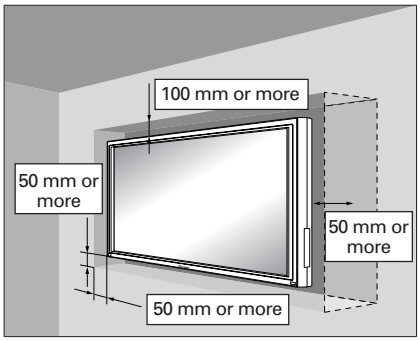
Note

For wall-mounting, do not bundle the cables in a way that block vents.



Flush-wall installation
(distance between unit and wall less than 50 mm)

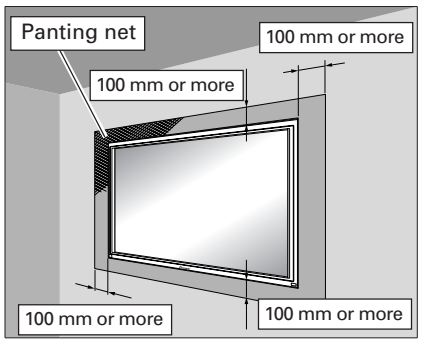
Requirements :
- Free air flow (With no obstructions within a distance of 300 mm from the unit's sides, top and bottom)
- Temperature of 0 °C to 35 °C



Ex.: Installation requirements when installed in wall recess

Wall-mounted installation
(distance between unit and wall greater than 50 mm)

Requirements :
- Free air flow (With no obstructions within a distance of 300 mm from the unit) around all four sides of the unit is not necessarily required when the unit is installed at a distance of greater than 50 millimeters away from the wall.
  * However, in such cases, the unit may not be placed behind a glass panel or any other obstruction which would create an enclosed space.
- Temperature of 0 °C to 40 °C



Ex.: Installation when covered with a Panting net

Wall-embedded installation
(i.e., installation in closed space)
(distance between unit and wall greater than 50 mm)

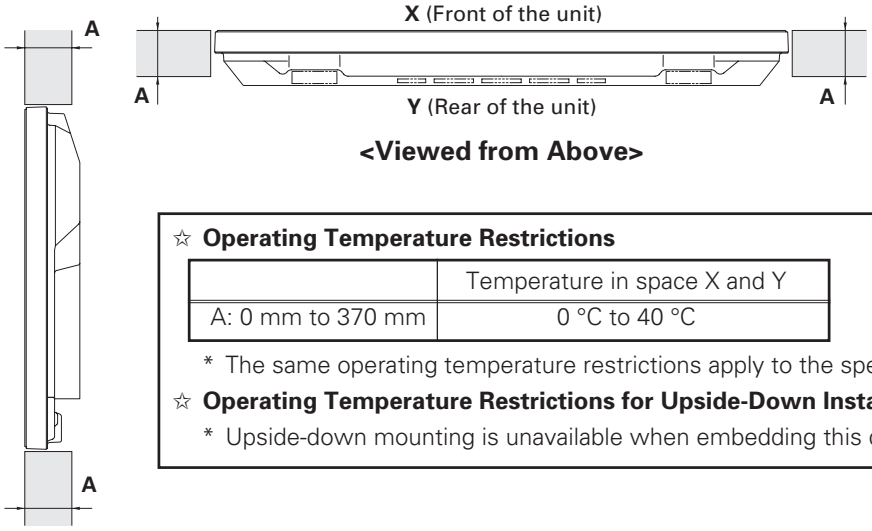
Requirements :
- See "3.6.3 Embedding in the wall" (pg. 59) for installation requirements.
- Temperature of 0 °C to 40 °C

3.6.3 Embedding in the wall

Carefully read the following imformation before trying to embed the unit in a wall. Observe all the limitations specified below.

Be sure to mount the unit so that twisting, bending, or other deformation of the unit does not exceed 4 mm.

(1) Embedding in walls with space provided behind the unit (no obstructions within a distance of 300 mm from the back surface of the unit).



<Viewed from Above>

<Viewed from the Right Side>

☆ **Operating Temperature Restrictions**

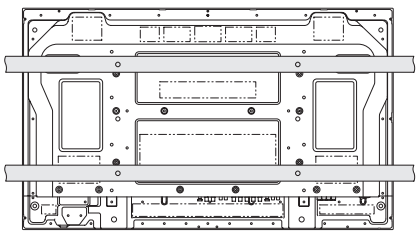
	Temperature in space X and Y
A: 0 mm to 370 mm	0 °C to 40 °C

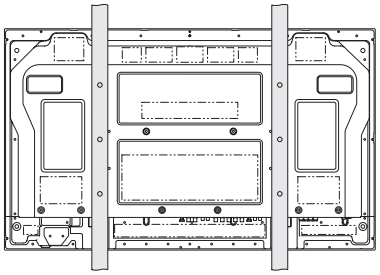
* The same operating temperature restrictions apply to the speaker system (PDP-S56-LR).

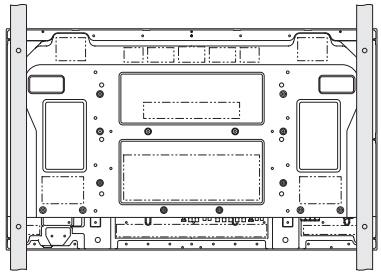
☆ **Operating Temperature Restrictions for Upside-Down Installations**

* Upside-down mounting is unavailable when embedding this device in a wall.

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings, and the number of bolts is correct.
(Also refer to "3.6.1 Mounting to fittings" (pg. 55).)

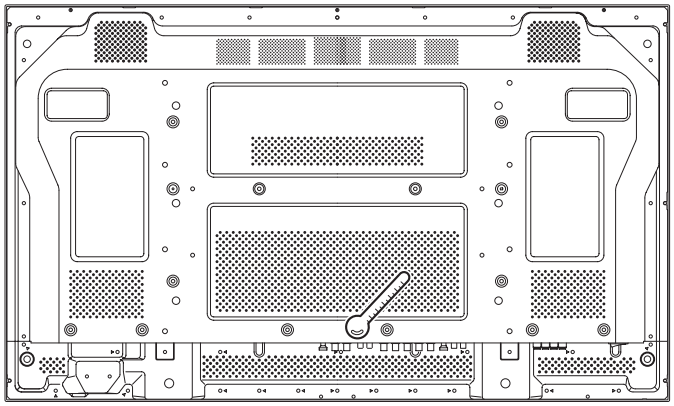


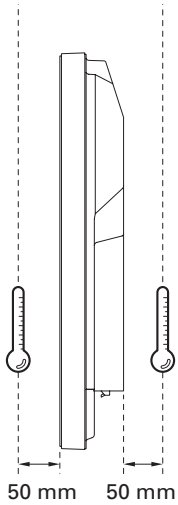




Temperature Measurement Points (Illustration for reference purposes)

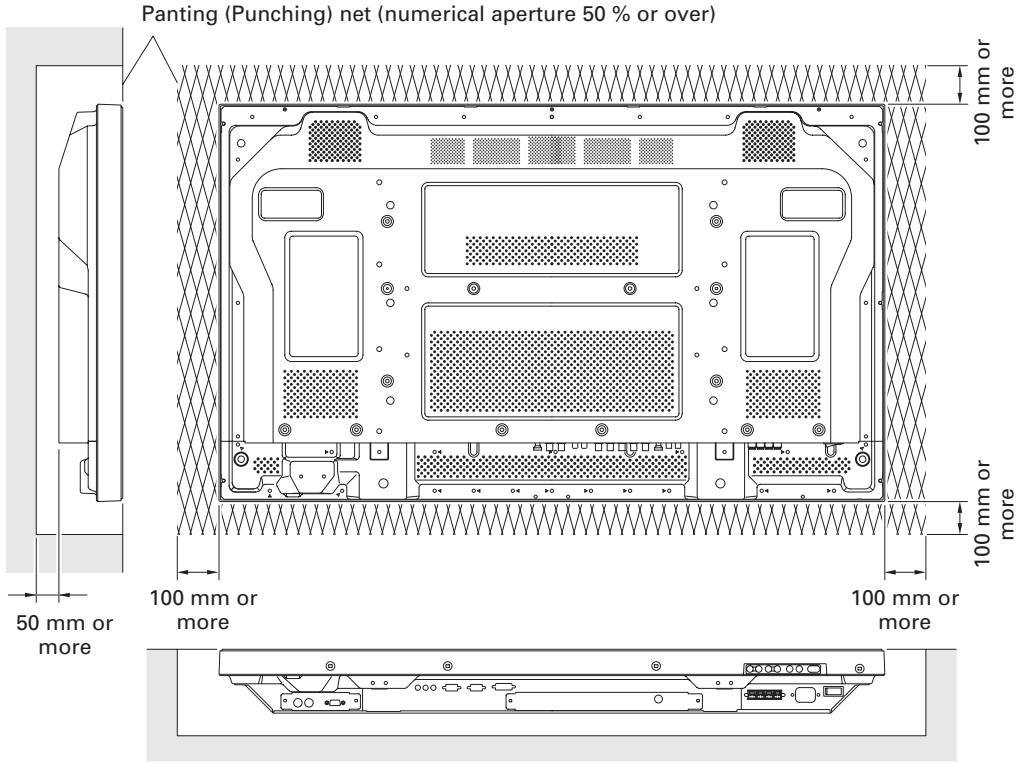
: **Thermometer (temperature measurement point)**





- Make measurements at a distance of 50 mm from the unit without directly subjecting the thermometer to fan exhaust.
- For spaces where temperature fluctuations are likely, gather additional measurement points for adequate data.

(2) Embedding in walls with no space provided behind the unit.



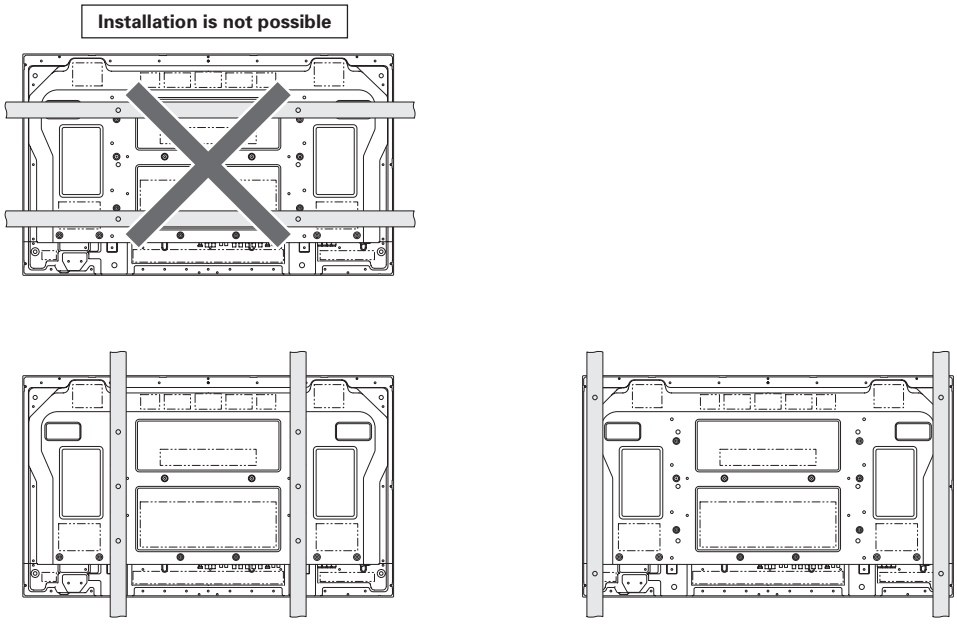
Cation : Due to possible heat issues, we do not recommend installing the panel in narrow, enclosed areas.

☆ **Operating Temperature Restrictions**
- Ambient temperature: 0 °C to 40 °C
- The same operating temperature restrictions apply to the speaker system (PDP-S56-LR).

☆ **Operating Temperature Restrictions for Upside-Down Installations**

* Upside-down mounting is unavailable when embedding this device in a wall.

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭. The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of bolts is correct.
(Also refer to "3.6.1 Mounting to fittings" (pg. 55).)



3.6.4 When the display is put in a box

Operating this display in confined spaces is not recommended.

- If the display is to be used in a confined space, observe the following conditions shown in the drawing below:

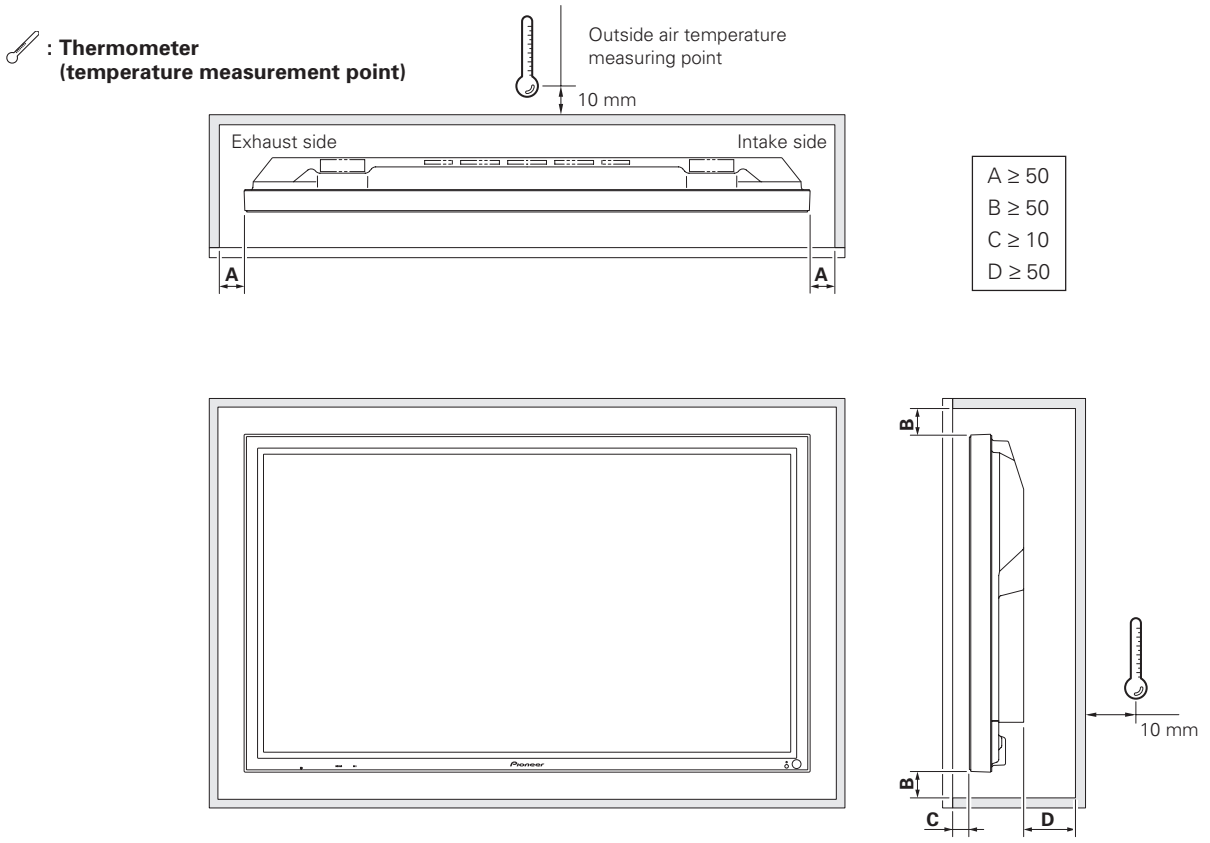
A ≥ 50
B ≥ 50
C ≥ 10
D ≥ 50

Use a mesh with aperture efficiency of 50 % or more.

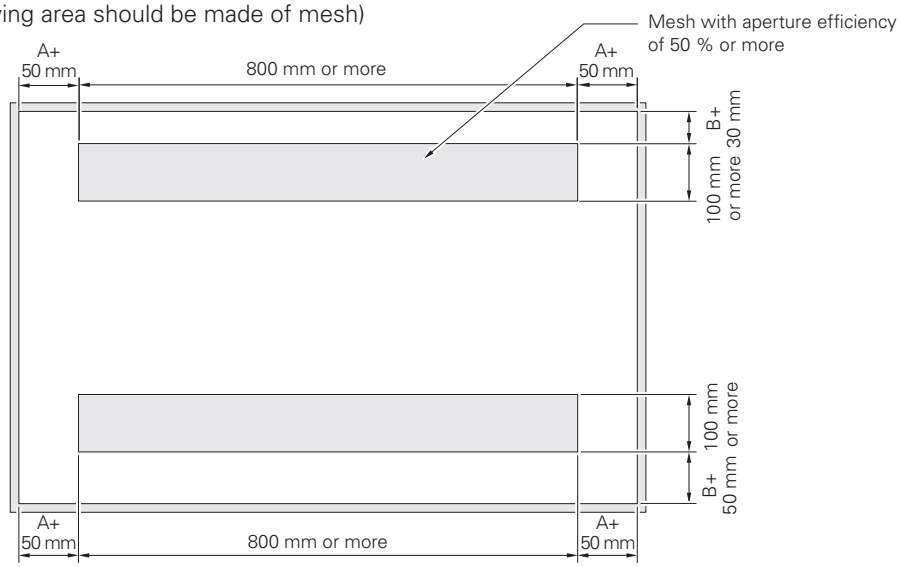
If hot air remains in the enclosed space, the temperature may rise causing a malfunction or fire. As a precaution, the inner wall should have sufficient heat resistance or fire resistance.

☆ **Usage temperature conditions (BOX air temperature)**

- Ambient temperature: 0 °C to 35 °C

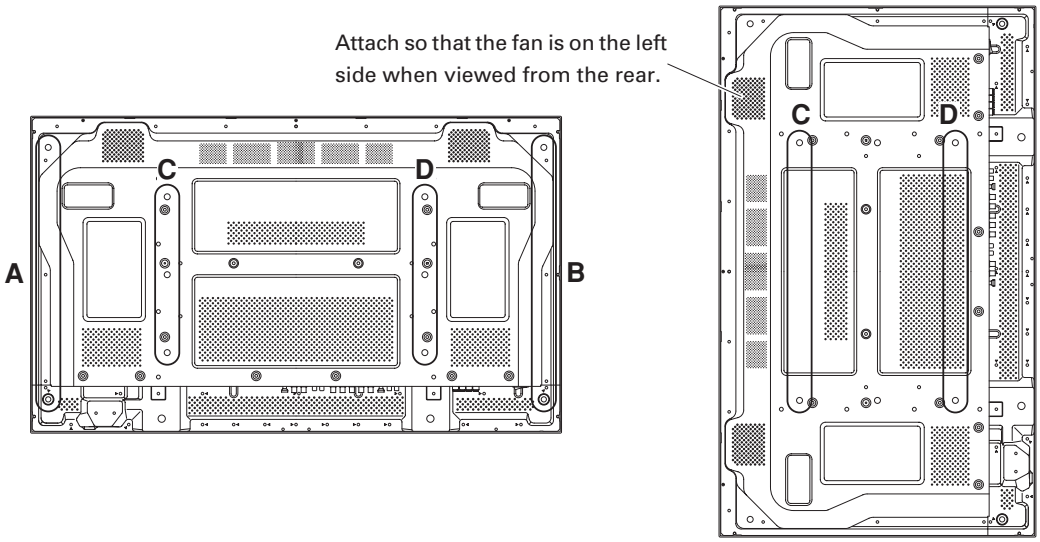


Rear view (the following area should be made of mesh)



3.6.5 Ceiling suspension (with wires)

When suspending with wire, attach the unit either at rows A and B or at rows C and D to keep it from warping. In addition, the unit must be attached at four or more points, with these points distributed symmetrically on opposite sides of the vertical and horizontal center lines.



When suspending from a ceiling with wire, use the brackets shown below to prevent concentrating loads on the upper two fixing points.

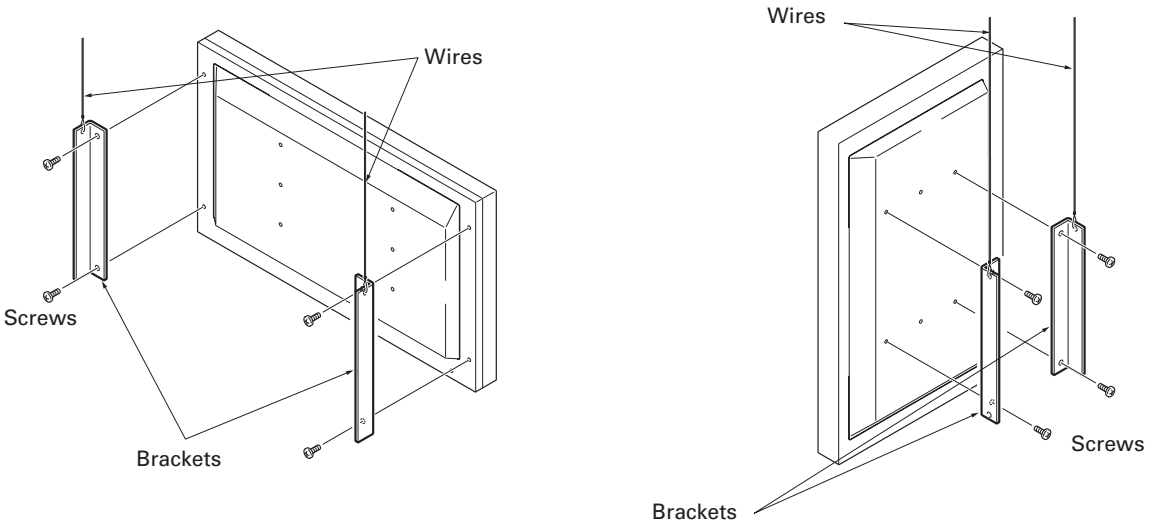
For additional safety, secure the wires to separate fittings or parts of the ceiling.

Use mounting screws of material stronger than soft steel and use hexagonal bolts.

Use wires adequate for the combined weight of the panel and the weight of the support brackets.

No!

When installing the Plasma Display, DO NOT use the handles as means of hanging the display.



☆ **Operating environment for standard installation**
- Ambient Temperature: 0 °C to 40 °C

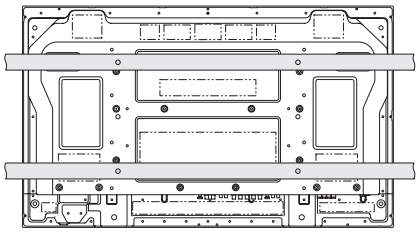
☆ **Operating environment for vertical installation** (*1, *2)
- Ambient Temperature: 0 °C to 40 °C

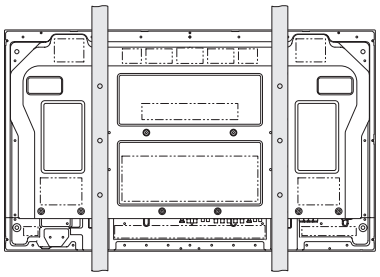
☆ **Operating temperatures for Upside-Down Installations** (*1, *2)
- Ambient Temperature: 0 °C to 40 °

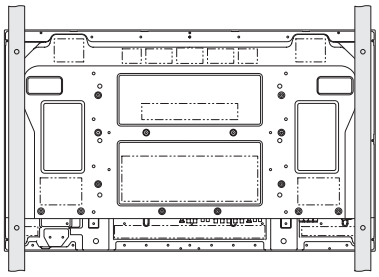
*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

*2 When INPUT2 has been selected, use input compatible signal up to 1280x1024 (60 Hz) at ambient temperature condition of 0 °C to 35 °C.

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings, and the number of bolts is correct.
(Also refer to "3.6.1 Mounting to fittings" (pg. 55).)

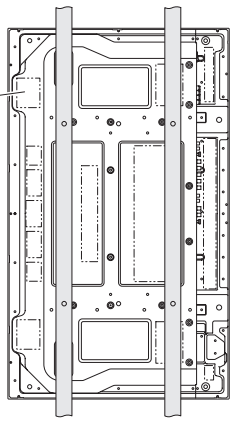




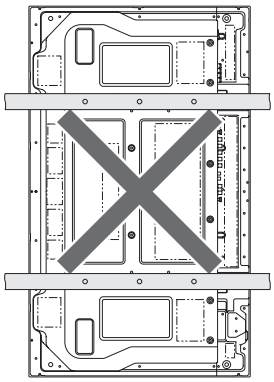


Vertical suspension

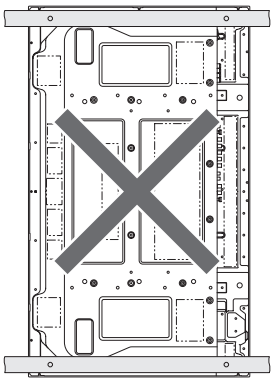
Attach so that the fan is on the left side when viewed from the rear.



Installation is not possible



Installation is not possible



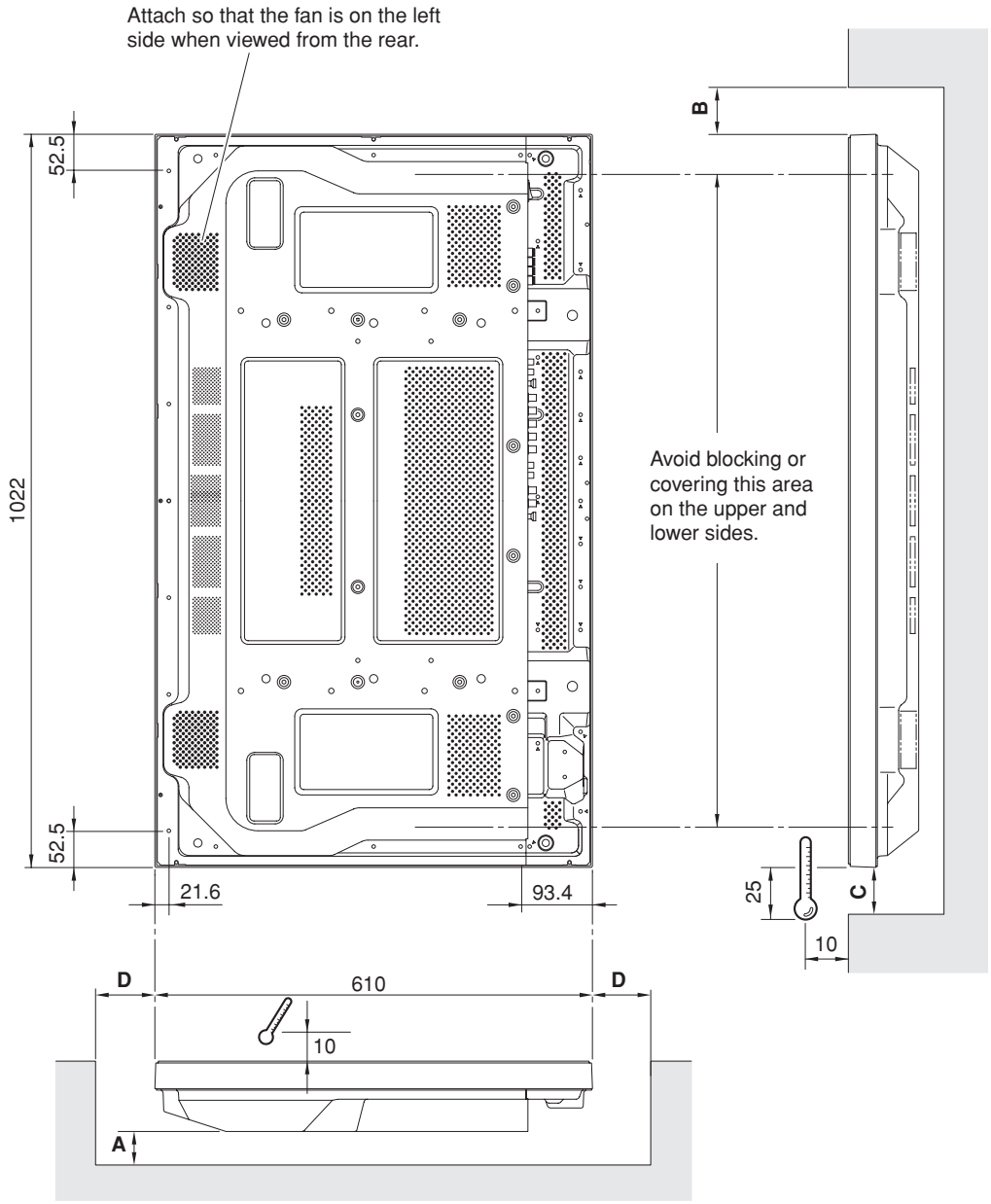
3.6.6 Hanging on the wall lengthwise

Carefully read the following imformation before attempting to mount the unit on the wall. Observe the various limitations specified below.

Be sure to mount the unit so that twisting, bending, or any other deformation does not exceed 4 mm.

Shaded areas indicate attachment points for mounting hardware.

: Thermometer (temperature measurement point)



☆ **Operating Temperature Restrictions** (*1, *2)

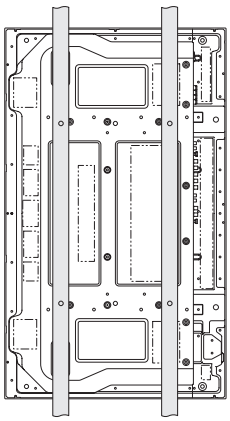
Distance from wall (A)	B	C	D	Ambient temperature
50 mm or more	100 mm or more	50 mm or more	50 mm or more	0 °C to 35 °C

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

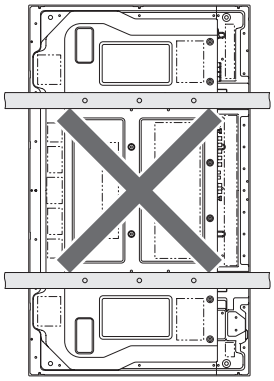
*2 When INPUT2 has been selected, use input compatible signal up to 1280x1024 (60 Hz) at ambient temperature condition of 0 °C to 35 °C.

Special Installation (Hanging on the wall lengthwise) [427CMX]

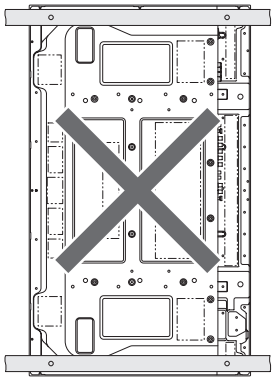
Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The method indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of bolts is correct.
(Also refer to "3.6.1 Mounting to fittings" (pg. 55).)



Installation is not possible



Installation is not possible



Note

Heat air is drawn from the interior of the unit by fans. Before installation, consider the heat resistance of the wall or other surface behind the unit. Exhaust temperatures can be 30 °C higher than the outside temperature.

Note

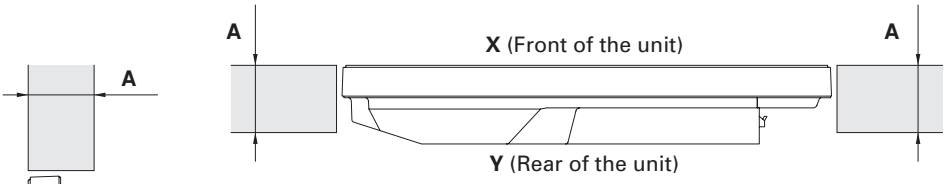
For wall-mounting, do not bundle the cables in a way that block vents.

3.6.7 Place product upright and flush into wall (embedding in the wall)

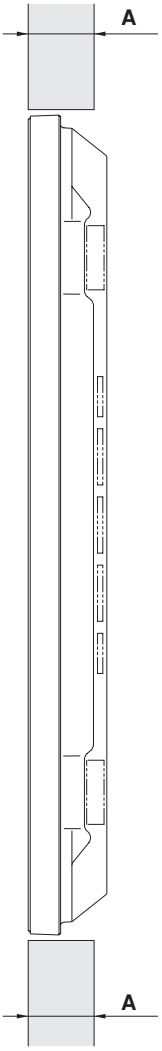
Carefully read the following instructions before trying to embed the unit in a wall. Observe all the limitations specified below.

Be sure to mount the unit so that twisting, bending, or other deformation of the unit does not exceed 4 mm.

(1) Embedding in walls with space provided behind the unit (with no obstructions within a distance of 300 mm from the back surface of the unit)



<Viewed from Above>



<Viewed from the Right Side>

☆ **Operating Temperature Restrictions** (*1, *2)

	Temperature in space X and Y
A: 0 mm to 370 mm	0 °C to 40 °C

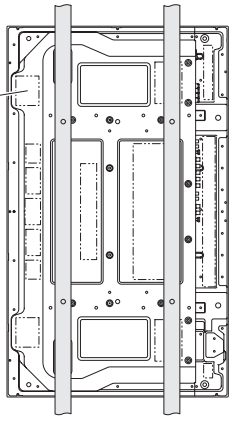
*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

*2 When INPUT2 has been selected, use input compatible signal up to 1280x1024 (60 Hz) at ambient temperature condition of 0 °C to 35 °C.

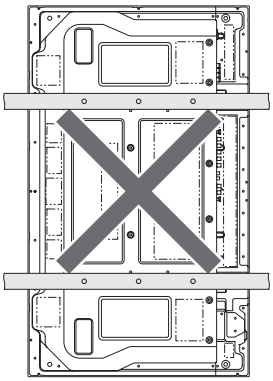
Special Installation (Place product upright and flush, embedded in the wall) [427CMX]

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of fixing bolts is correct.
(Also refer to "3.6.1 Mounting to fittings" (pg. 55).)

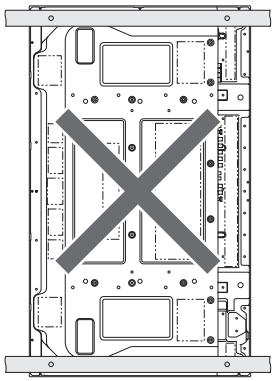
Attach so that the fan is on the left side when viewed from the rear.



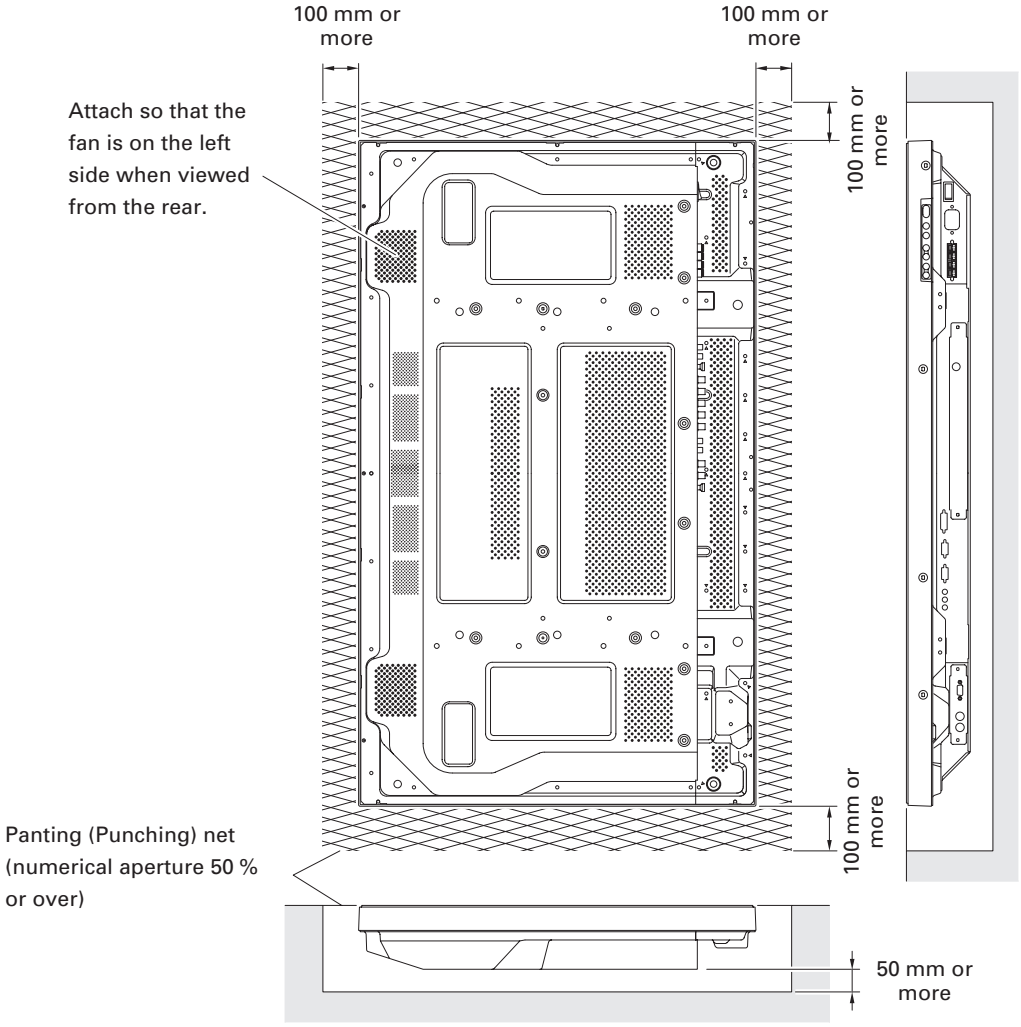
Installation is not possible



Installation is not possible



(2) Embedding in walls with no space provided behind the unit


100 mm or more
100 mm or more
Attach so that the fan is on the left side when viewed from the rear.
100 mm or more
100 mm or more
Panting (Punching) net (numerical aperture 50 % or over)
50 mm or more

Cation : Due to possible heat issues, we do not recommend installing the panel in narrow, enclosed areas.

☆ **Operating Temperature Restrictions** (*1, *2)

- Ambient temperature: 0 °C to 35 °C

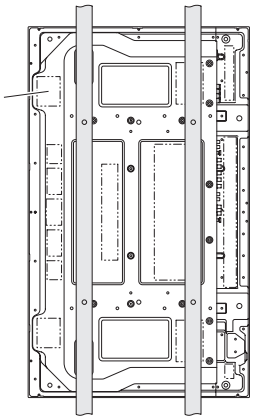
*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

*2 When INPUT2 has been selected, use input compatible signal up to 1280x1024 (60 Hz) at ambient temperature condition of 0 °C to 35 °C.

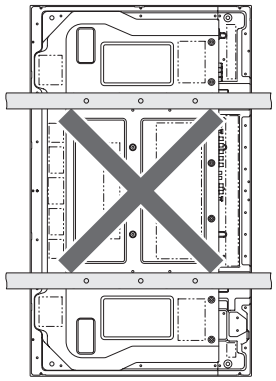
Special Installation (Place product upright and flush, embedded in the wall) [427CMX]

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭ . The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of bolts is correct.
(Also refer to "3.6.1 Mounting to fittings" (pg. 55).)

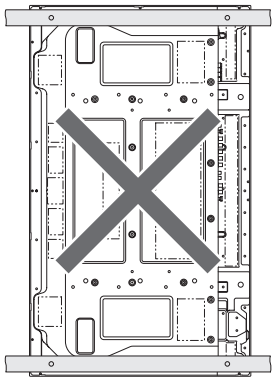
Attach so that the fan is on the left side when viewed from the rear.



Installation is not possible

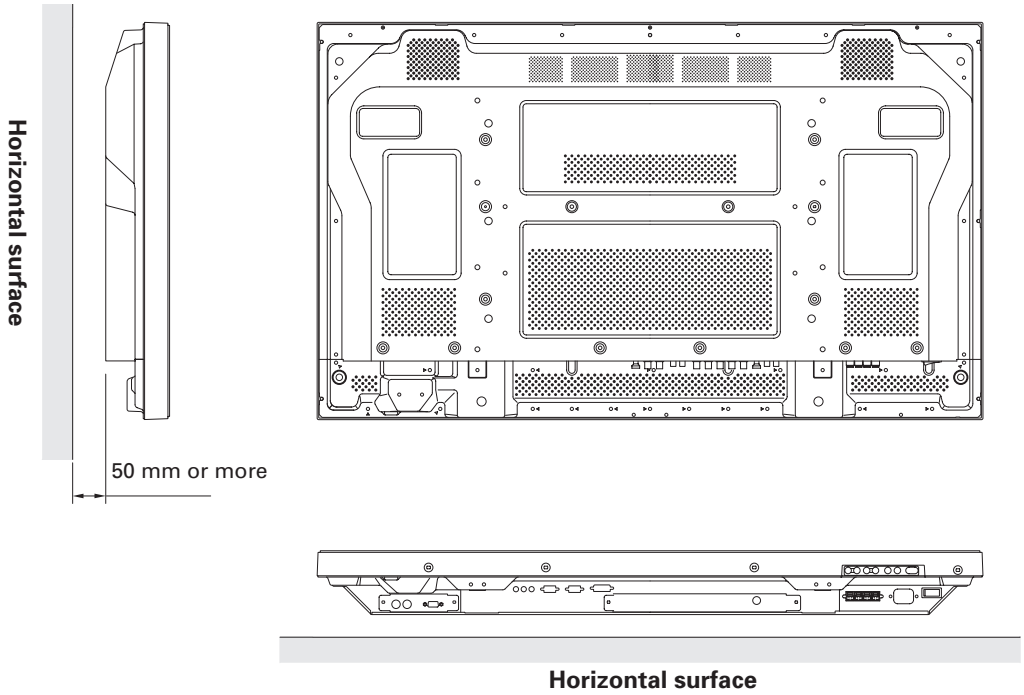


Installation is not possible



3.6.8 Installed facing upward

(1) When installed on top of a horizontal surface <an open space other than a horizontal surface>

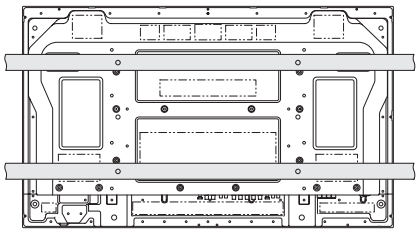


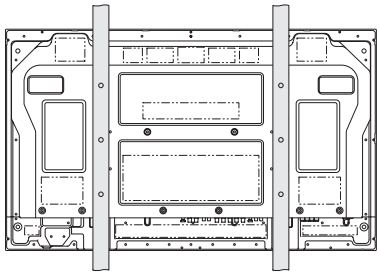
☆ **Operating Temperature Restrictions** (*1)

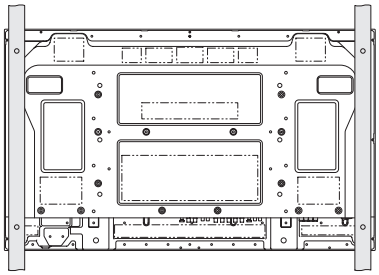
- Ambient temperature: 0 °C to 35 °C
- The same operating temperature restrictions apply to the speaker system (PDP-S56-LR).

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

Methods of Securing: Basic methods of securing are shown below. Avoid blocking or covering areas aside from those indicated by ▭. The methods indicated by a large "X" must not be used.
Before attaching the unit to fittings, double-check that the thickness and height of the fittings and the number of bolts is correct.
(Also refer to "3.6.1 Mounting to fittings" (pg. 55).)







(2) When the Plasma Display is in a confined space
Operating this display in confined spaces is not recommended.

- If the display is to be used in confined spaces, observe the following conditions shown in the drawing below:
  A ≥ 50

- If heat remains in the enclosed space, the temperature may rise causing a malfunction or fire. As a precaution, the inner wall should have sufficient heat resistance or fire resistance.

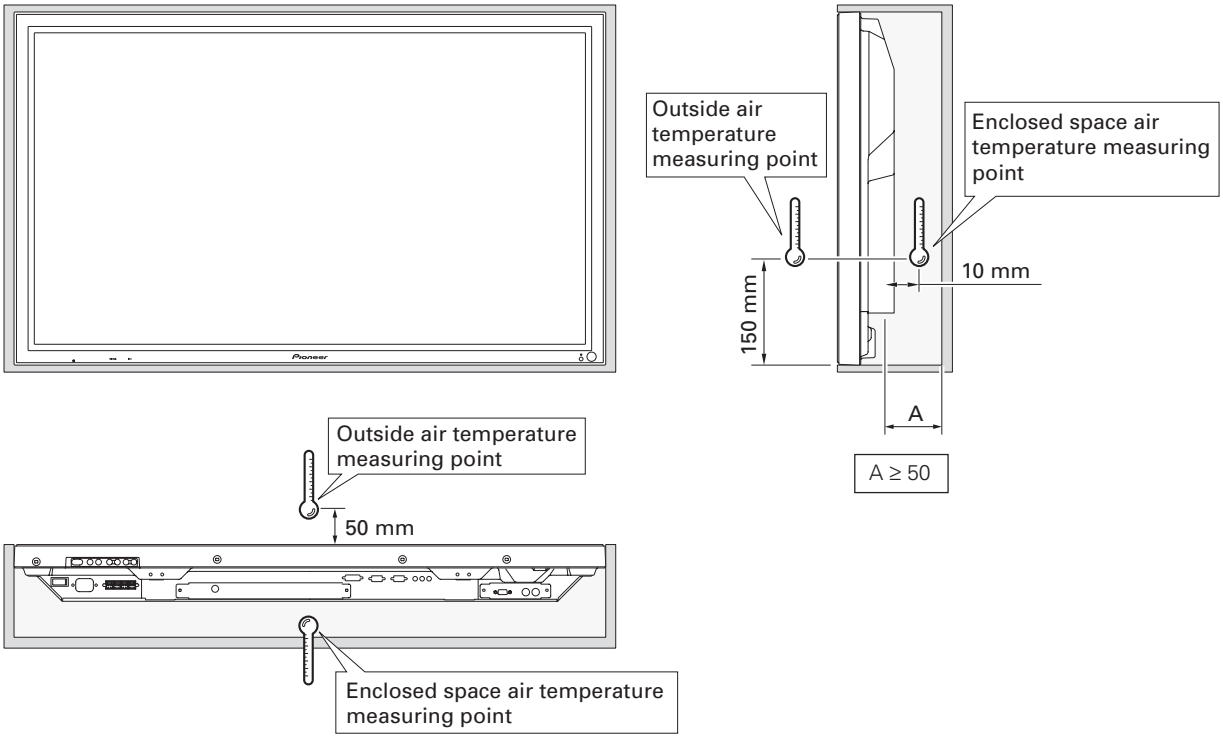
- Leave a space at least 10 mm wide when installing glass etc. on the front of the Plasma Display.

☆ **Usage temperature conditions** (*1)

- Ambient temperature: 0 °C to 35 °C (Outside air temperature)
- Space enclosed by the back surface of the Plasma Display: 0 °C to 35 °C (Use a fan etc. to discharge air to maintain this temperature range.)

*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).

: Thermometer (temperature measurement point)



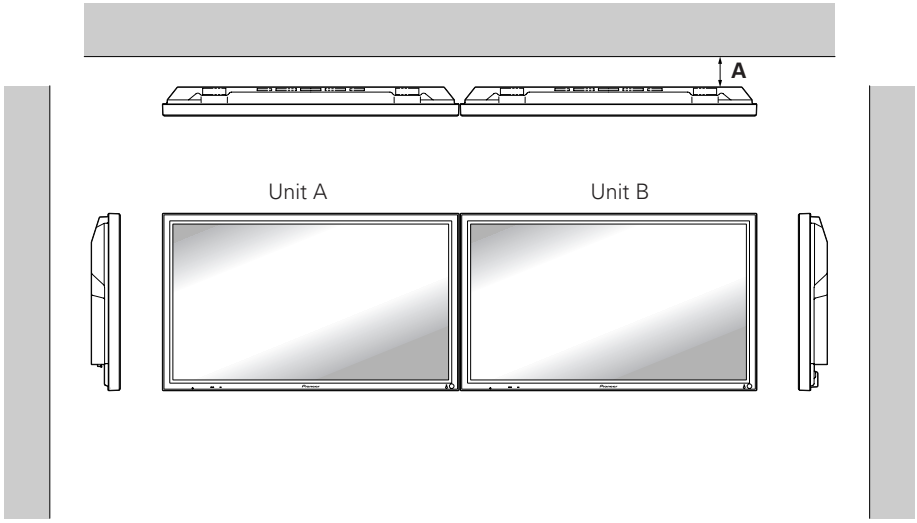
Note

When installing the Plasma Display facing upwards, do not place anything on top of it nor apply any load on it from above.

3.6.9 Horizontal connections

While the display is designed to accommodate side-by-side installations, keep in mind that specific installation configurations may affect ventilation. Observe the following requirements:

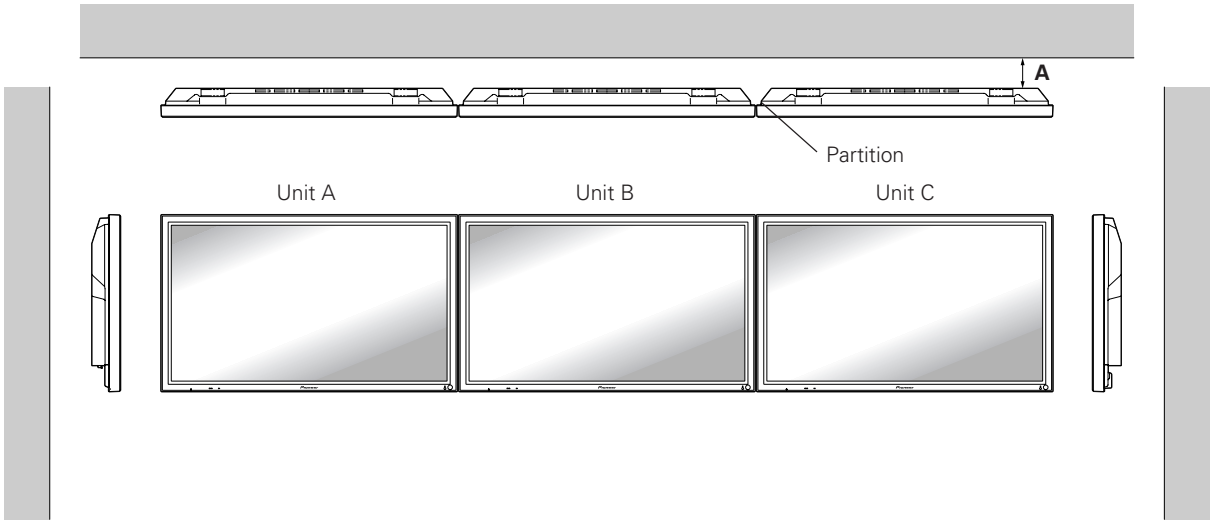
① Installation of up to two units (Horizontal connection)
The following table lists the operating temperature conditions when installing more than one panel. Use the units under conditions that keep the outside atmosphere in this range.



☆ **Operating Temperature Restrictions**

Distance from wall (A)	Ambient temperature
50 mm or more	0 °C to 40 °C

② Installing three or more units (Horizontal connection)
The following table lists the operating temperature conditions. Use the units under conditions that keep the outside atmosphere in this range.



☆ **Operating Temperature Restrictions**

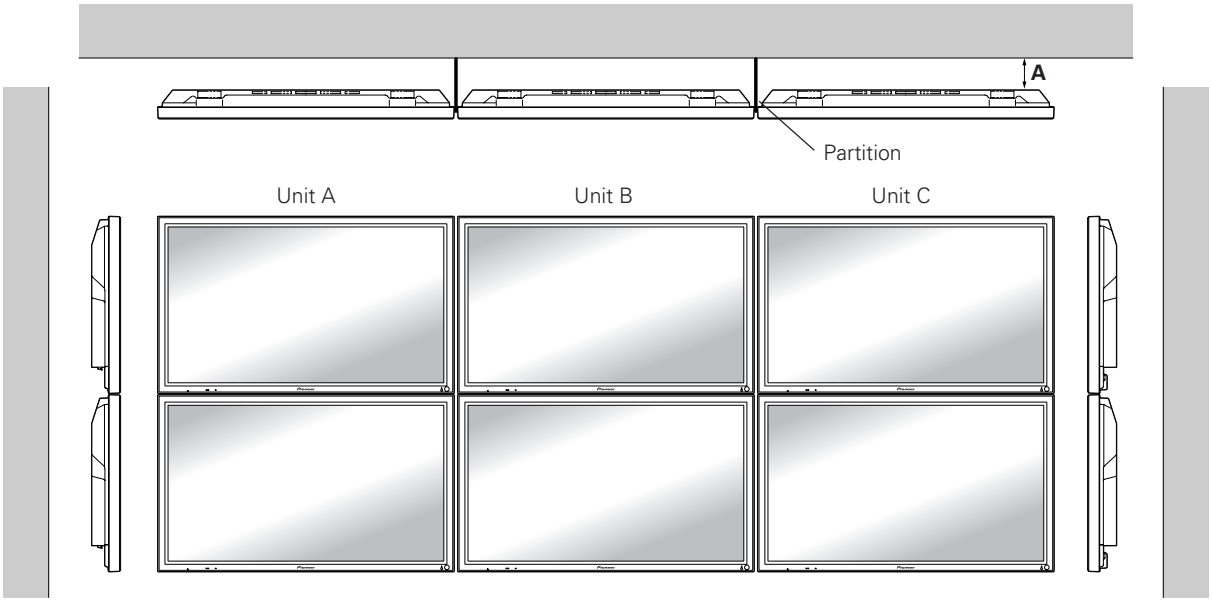
Distance from wall (A)	Ambient temperature
50 mm or more	0 °C to 40 °C

3.6.10 Multiple

While the display is designed to accommodate side-by-side installations, keep in mind that specific installation configurations may affect ventilation. Observe the following requirements:

① Installing multiple (2 Vertical units)

The following table lists the operating temperature conditions when installing more than one panel. Use the units under conditions that keep the outside atmosphere in this range.



In case of lateral connections, ensure that left and right partitions are provided.

To prevent heat venting from one video wall plasma panel into another panel, each display must be oriented in the same direction.

In the above example, each panel is shown with the Pioneer logo at the bottom.

☆ **Operating Temperature Restrictions**

Distance from wall (A)	Ambient temperature
50 mm to 300 mm or less	0 °C to 35 °C
300 mm or more	0 °C to 40 °C

4.1 Standard Mounting Components Features and Characteristics

In addition to reliability and vivid display resulting from its large screen area, brightness, and image quality, the Plasma Display (PDP-507CMX/PDP-427CMX) is thin and lightweight. This panel can be mounted in locations not possible for conventional displays.
We considered various mounting patterns and operating conditions during the design of the Plasma Display (PDP-507CMX/PDP-427CMX). A wide range of standard mounting hardware is available for easy mounting.

- **Video Card: PDA-5003/PDA-5004**
  The video card makes video input and analog RGB input possible.
  This product has a total of three lines: a COMPOSITE (1), S INPUT (1), and an analog RGB INPUT or COMPONENT INPUT (1). Furthermore, it can handle three-line or two-line audio, thus increasing the uses for video presentations.

- **Table Top Stand: PDK-TS07**
  This on-board support designed for the Plasma Display enables vertical placement of the unit.

- **Tilt Mount Unit: PDK-5011**
  This mount permits tilting of the display downward from the horizontal by up to 25 degrees. Mount depth is 145 mm or less (in vertical position, without optional speaker). This hardware permits a wide range of viewing angles.

- **Wall Mount Unit: PDK-WM01**
  Distance from the rear surface of the Plasma Display to the wall is 32 mm.
  This mount provides installation holes for various wall-mounting arrangements. The mount is constructed so that it can be easily attached to the main unit.

- **Ceiling Mount Unit: PDK-5012**
  Simple rod-type mounting hardware permits display panning over a range of 45 degrees and up to 25-degree downward tilting from the horizontal. This hardware enables installation of the unit in a wide variety of locations.

- **Mobile Cart: PDK-5014**
  This is an extremely stable movable stand that one person can use to freely move the Plasma Display.
  It can also be used to adjust the screen height and the screen angle to match the line of sight.

- **PDP Bracket: PDK-5005 (Can be used only with the PDP-507CMX)**
  Can be used as a handle when moving the unit, or as a frame when wire-suspending it or hanging it on the wall. Most suitable for temporary use when quick, easy, and safe attachment is necessary.

- **Speaker System: PDP-S53-LR (Can be used only with the PDP-507CMX)**
  Speaker System: PDP-S56-LR (Can be used only with the PDP-427CMX)
  Two way speakers feature 5 cm (2 in.) tweeter and 8 cm (3-3/16 in.) woofer in a vertical arrangement.

4.2 Handling the Standard Mounting Components

4.2.1 Handling precautions

This section of the manual discusses ways to mount, install, and handle the mounting hardware exclusively designed for Pioneer Plasma Displays. Mounting should be performed by qualified experts.
Refer all installation and mounting work to qualified installers, or request assistance from a Pioneer dealer.

4.2.2 Precautions for installation contractors

1) Before installation

Observe the specifications supplied in "3.1 Installation Site Requirements" earlier in this manual.

2) During Installation

Carefully read and observe the contents of this section of the manual.
The installation work should be performed by two or more people.

3) After installation

After installation the mounting hardware, check for adequate strength and properly tightened screws. Repeat this inspection after mounting the display.

4) Delivering to the customer

(1)Explaining mounting precautions

The mounting contractor is responsible for explaining the following precautions to the customer after mounting and installation work is complete. Even if the particulars of an installation are letter-perfect, your work may be perceived as inadequate unless you patiently and thoroughly explain these precautions to the customer.

- **The following are highly dangerous and must be avoided at all times:**
- **Any sudden application of force, including pushing and pulling**
- **Splashing water on the unit**
- **Placing any object on the unit**
- **Touching mount screws and other mounting hardware**

- **For worry-free use of the unit:**
- If problem arises, the user should immediately ask the installation contractor to inspect the unit and make repairs if necessary.
- To guard against accidents, ask the customer avoid making tilt or height adjustments. Changes should be referred to the installation contractor.

(2)Mounting contractor contact form

As the mounting and installation contractor, please complete the contractor contact form supplied with the unit and give it to the end-user after post-installation inspections are complete.

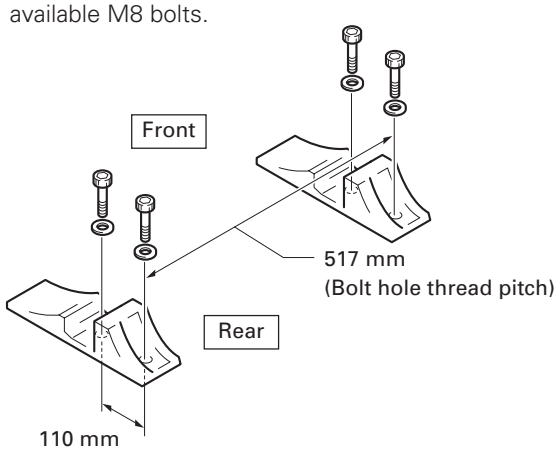
(3)Periodic inspections

Over time, aging of various components of the suspension/mounting hardware that may not be readily visible can render the installation unreliable. This may lead to the display breaking free of its mounting. Please recommend periodic inspections.

4.3 Installation of the Attachment Stand (Can be used only with the PDP-427CMX)

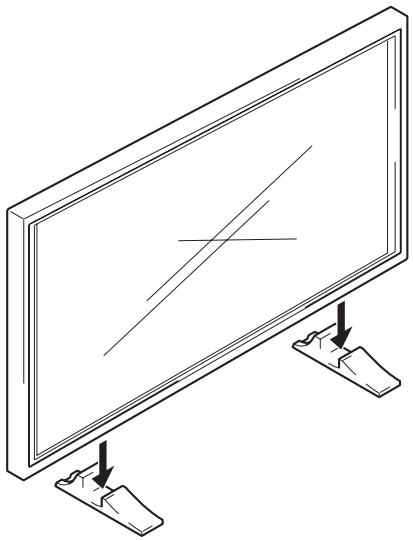
Be sure to fix the supplied stands to the installation surface. Use commercially available M8 bolts that are 25 mm longer than the thickness of the installation surface.

① Fix the supplied stands to the installation surface at each of the 4 prepared holes using commercially available M8 bolts.

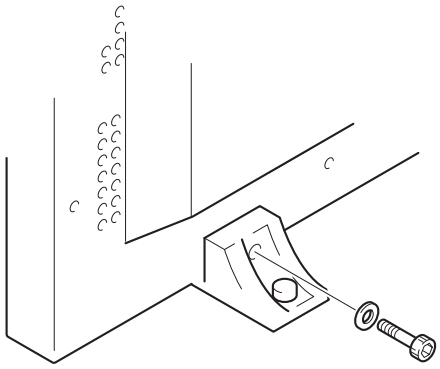


Always install the supplied display stands according to the dimensions shown in the accompanying illustration.

② Insert the unit into the stand.



③ Tighten the bolt against the washer so as to secure the unit.
After manually tightening the bolts, completely tighten them with the attached tools.

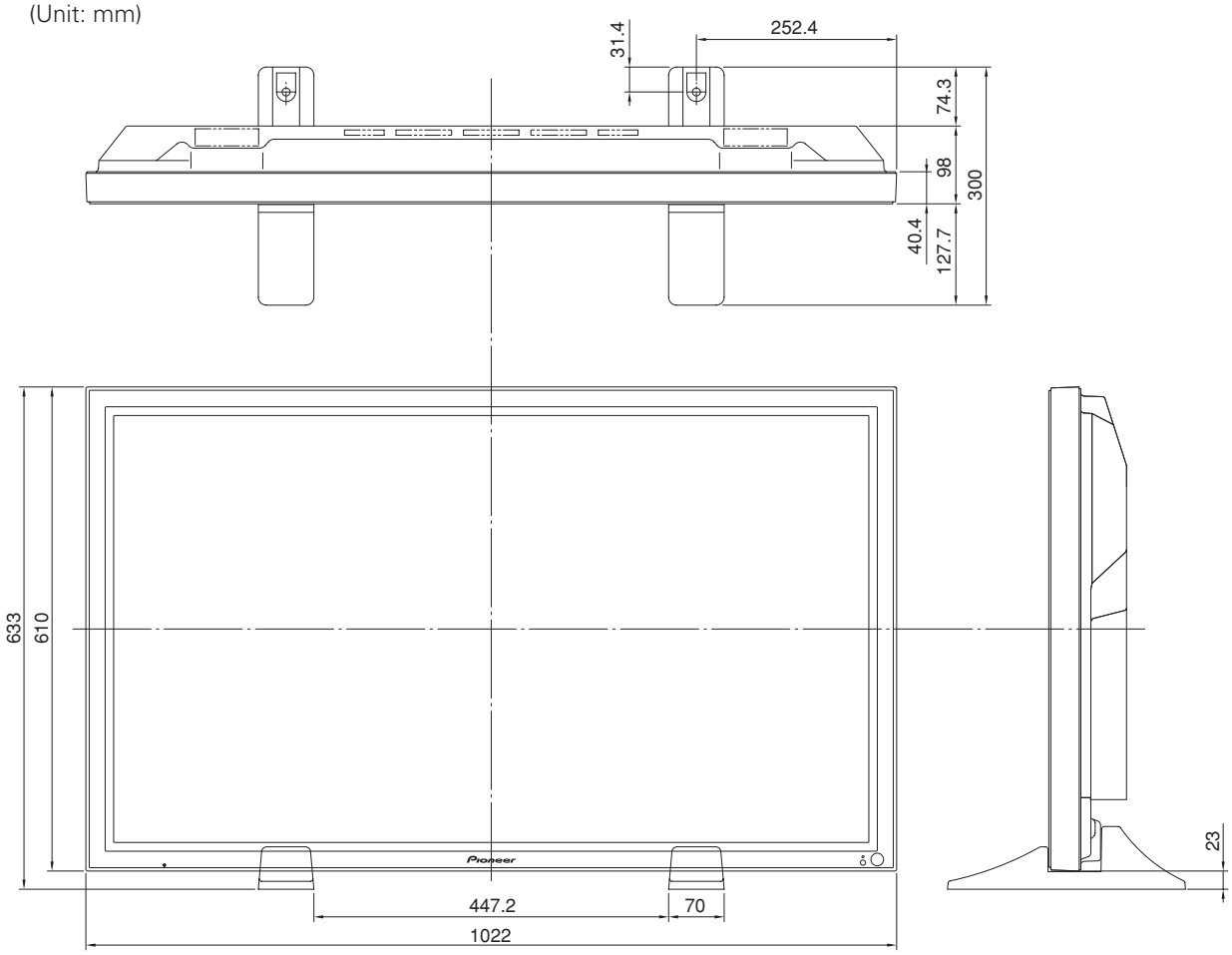


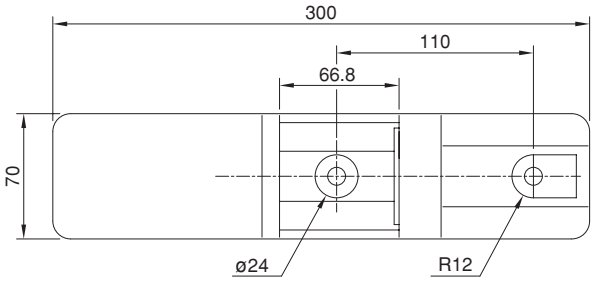
Use a 6 mm hexagonal wrench to tighten the bolt.

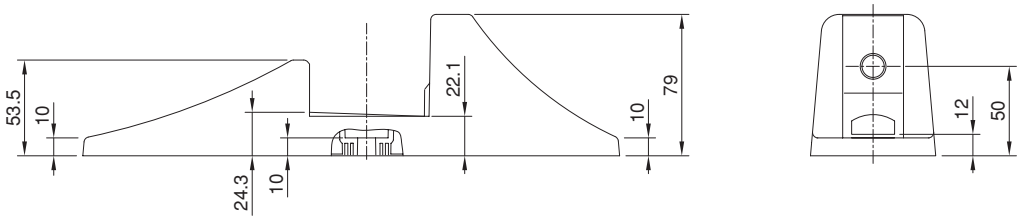
CAUTION The unit weights 30 kg. or more. Its thinness makes it unstable. Therefore, it should be unpacked, carried, and installed by two or more people.

Dimensions

(Unit: mm)







4.4 Video Card: PDA-5003/PDA-5004

4.4.1 Specifications

External dimensions ..... PDA-5003: 301.5 mm (W) × 27.6 mm (H) × 148.9 mm (D)
(11-7/8 in. (W) × 1-3/32 in. (H) × 5-7/8 in. (D))
PDA-5004: 301.5 mm (W) × 27.6 mm (H) × 148.3 mm (D)
(11-7/8 in. (W) × 1-3/32 in. (H) × 5-27/32 in. (D))
Weight ..... 0.4 kg (14 oz)
Dimensions of packaging ..... 359 mm (W) × 68 mm (H) × 234 mm (D)
(14-1/8 in. (W) × 2-11/16 in. (H) × 9-7/32 in. (D))
Package weight ..... 1.4 kg (3.1 lbs.)

Input/Output jacks

■ **PDA-5003**

Video-related

INPUT1 Input — The following signal is supported only when a PDA-5003 is installed.
- Component video signal
  Y ..... 1 Vp-p/75 Ω/negative sync.
  P_B/C_B, P_R/C_R ..... 0.7 Vp-p (color 100 %)/75 Ω

INPUT2 Input — DVI-D 24-pin connector
Digital video signal (HDCP supported)

INPUT3 Input — S-VIDEO jack (Mini-DIN, 4-pin connector)
- Y/C separate video signal
  Y ..... 1 Vp-p/75 Ω/negative sync.
  C ..... 0.286 Vp-p/75 Ω (NTSC)
  0.3 Vp-p/75 Ω (PAL)

INPUT4 Input — BNC jack
- Composite video signal ..... 1 Vp-p/75 Ω/negative sync.

Output — BNC jack ..... 75 Ω/with buffer

INPUT5 Input — BNC jack × 5
- RGB signal (for SYNC ON G)
  RGB ..... 0.7 Vp-p/75 Ω/no sync.
  HD/VS, VD ..... TTL level/positive and negative polarity/75 Ω or 2.2 kΩ (with impedance switching)
  SYNC ON G ..... 1 Vp-p/75 Ω/negative sync.
- Component video signal
  Y ..... 1 Vp-p/75 Ω/negative sync.
  P_B/C_B, P_R/C_R ..... 0.7 Vp-p (color 100 %)/75 Ω

Audio-related

Input — AUDIO INPUT (for INPUT3/4)
Pin jack (×2)
L/R ..... 500 mVrms/more than 10 kΩ
AUDIO INPUT (for INPUT5)
Pin jack (×2)
L/R ..... 500 mVrms/more than 10 kΩ

■ **PDA-5004**

Video-related

INPUT1 Input — The following signal is supported only when a PDA-5004 is installed.
- Component video signal
  Y ..... 1 Vp-p/75 Ω/negative sync.
  P_B/C_B, P_R/C_R ..... 0.7 Vp-p (color 100 %)/75 Ω

INPUT2 Input — DVI-D 24-pin connector
Digital video signal (HDCP supported)

INPUT3 Input — S-VIDEO jack (Mini-DIN, 4-pin connector)
- Y/C separate video signal
  Y ..... 1 Vp-p/75 Ω/negative sync.
  C ..... 0.286 Vp-p/75 Ω (NTSC)
  0.3 Vp-p/75 Ω (PAL)

INPUT4 Input — RCA jack
- Composite video signal ..... 1 Vp-p/75 Ω/negative sync.

Output — RCA jack ..... 75 Ω/with buffer

INPUT5 Input — RCA jack
- RGB ..... 0.7 Vp-p/75Ω/no sync.
  SYNC ON G ..... 1 Vp-p/75 Ω/negative sync.
- Component video signal
  Y ..... 1 Vp-p/75 Ω/negative sync.
  P_B/C_B, P_R/C_R ..... 0.7 Vp-p (color 100 %)/75 Ω

Audio-related

Input — AUDIO INPUT (for INPUT3)
Pin jack (×2)
L/R ..... 500 mVrms/more than 10 kΩ
AUDIO INPUT (for INPUT4)
Pin jack (×2)
L/R ..... 500 mVrms/more than 10 kΩ
AUDIO INPUT (for INPUT5)
Pin jack (×2)
L/R ..... 500 mVrms/more than 10 kΩ

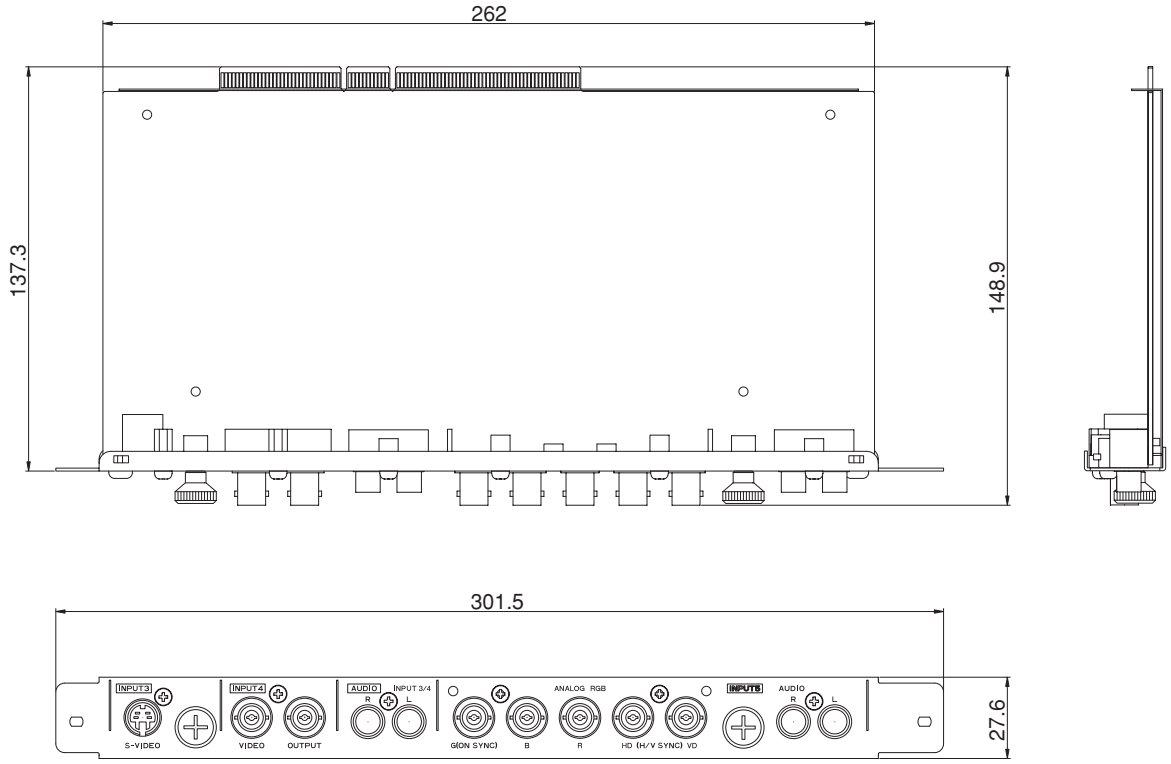
Accessories

Label for remote control unit ..... × 1
Connector indicator label ..... × 1
Screws (3 × 8) ..... × 2
Operating instructions ..... × 1
Warranty ..... × 1

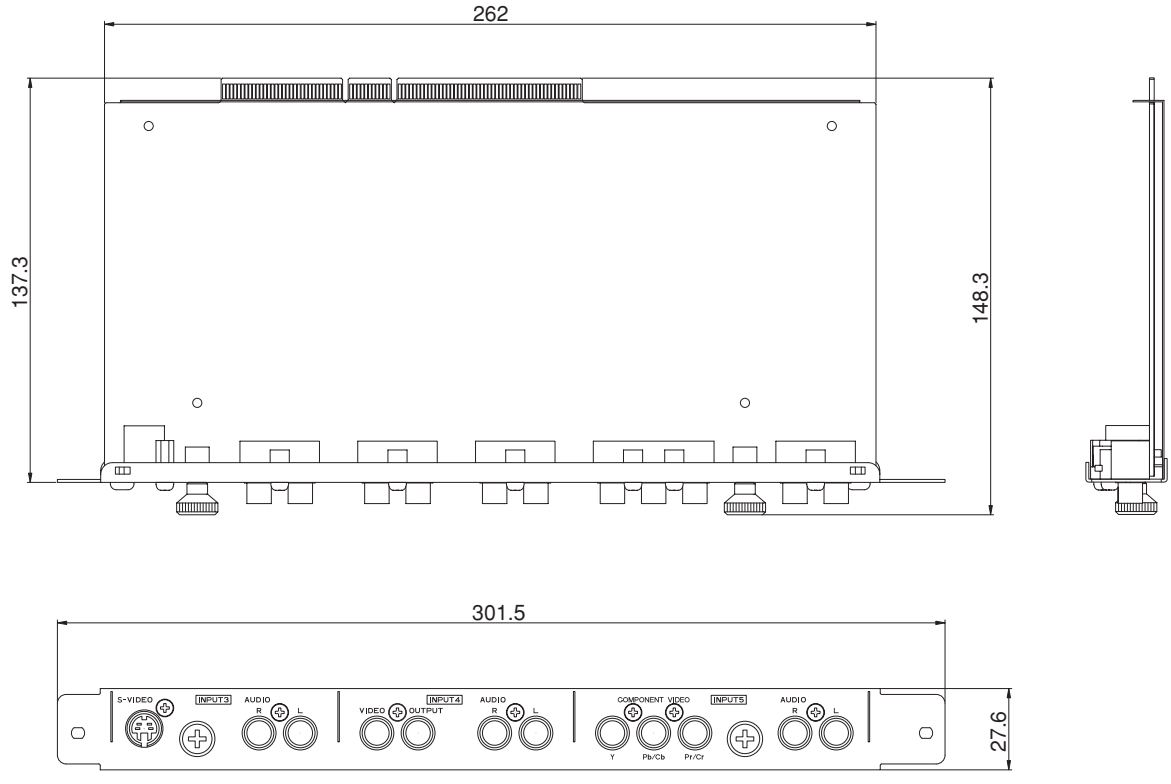
4.4.2 External Dimensions

(Unit: mm)

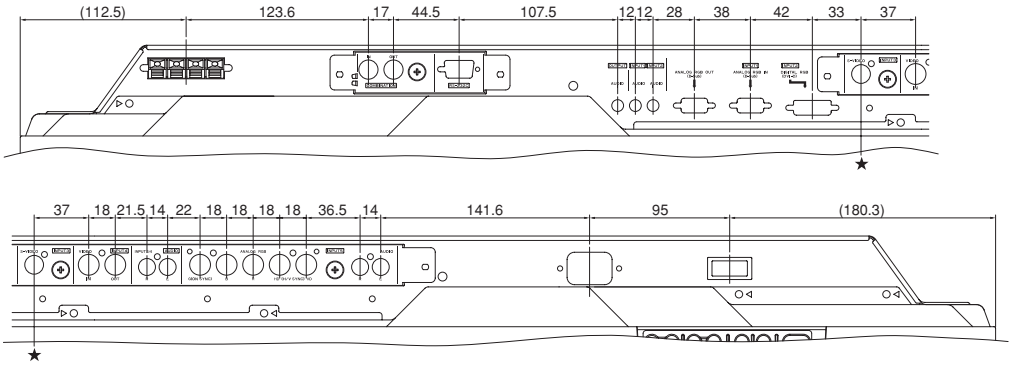
■ **PDA-5003**



■ **PDA-5004**

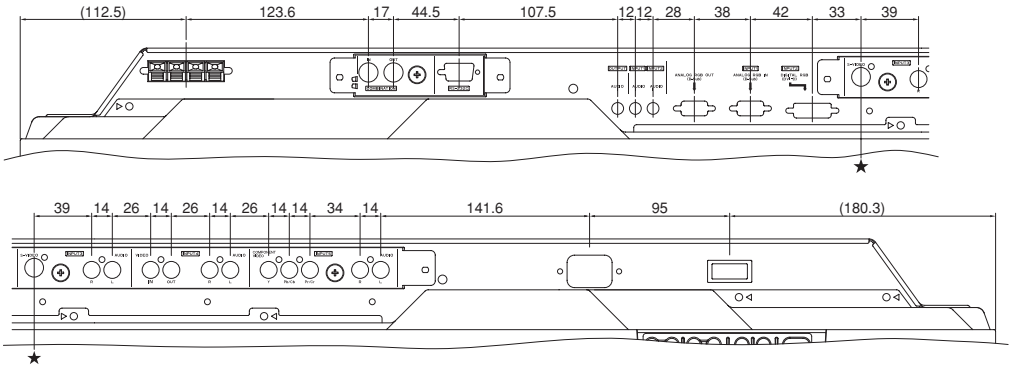


<PDP-507CMX connection panel: when equipped with PDA-5003>



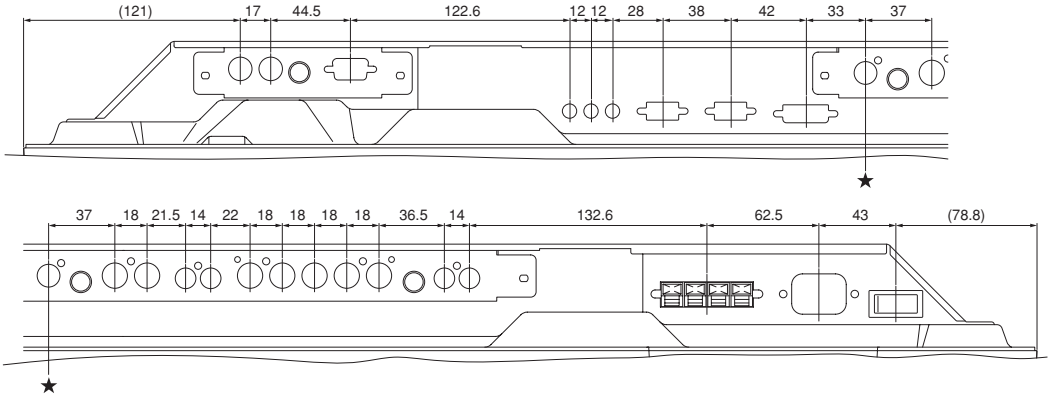
★: Symbol indicates the alignment point.

<PDP-507CMX connection panel: when equipped with PDA-5004>



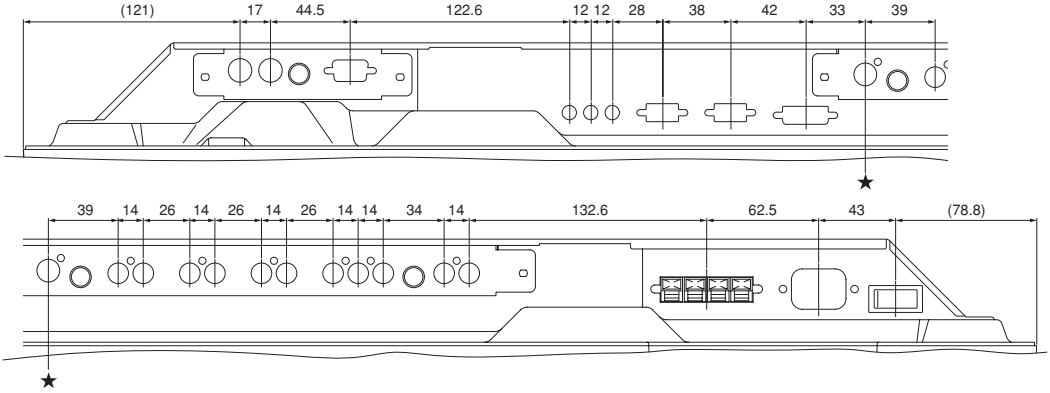
★: Symbol indicates the alignment point.

<PDP-427CMX connection panel: when equipped with PDA-5003>



★: Symbol indicates the alignment point.

<PDP-427CMX connection panel: when equipped with PDA-5004>



★: Symbol indicates the alignment point.

4.4.3 Installing procedures

Installation instructions are listed below. When installing the unit, if a screw or other object should drop inside the Plasma Display, immediately consult your nearest Pioneer Service Center. Continuing operation may damage the panel. This device has been designed for installation on the Pioneer Plasma Display PDP-507CMX/PDP-427CMX.
Installation procedures are as follows:
Check the following before installing this video card:

- Plasma Display is disconnected from the computer and any other devices.
- The Plasma Display is unplugged from the wall outlet before installing/removing a card from a panel slot.

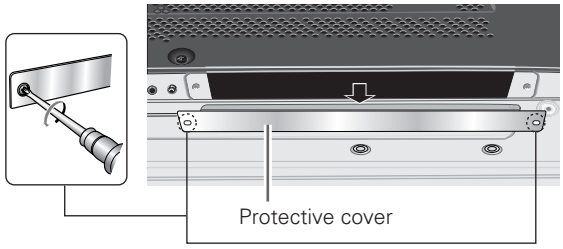
⚠ Installation Notes:

- Do not install the PDA-5002 on the PDP-507CMX/PDP-427CMX display units.
- When opening the protective cover, take care not to drop screws or other objects in the opening. Objects dropped inside the display may cause damage or malfunction.
- When installing a video card, if the Plasma Display is laid with its screen side facing down, the work surface should be flat and level. The packing material, a blanket, or other soft material should be spread on the work surface to protect the screen before laying the panel down. Take care to prevent scratches or other damage to the unit from tools or other objects. Never rest the display on a surface in such a way that weight or pressure is placed only on the screen surface.
- This video card has been designed for exclusive use with the Pioneer Plasma Display PDP-507CMX/PDP-427CMX. Do not attempt unauthorized modifications or alterations since malfunction or damage may result.
- Take care not to modify or damage the card's internal devices in any way.
- Before installation, take precautions to eliminate static electricity on your body. Do not touch the card's circuitry or devices.
- This device has not been designed to be repeatedly removed and reinstalled. Avoid removing the card once it is installed.
- When installing the PDA-5003, it may be necessary to adjust the impedance selector switch setting. Confirm this item before installing.
- Prior to insertion, use a cloth containing ethanol to clean the PCI bus. Wipe in the direction of the electrodes to remove dirt and dust. Wiping with a dry cloth may cause damage due to static electricity.

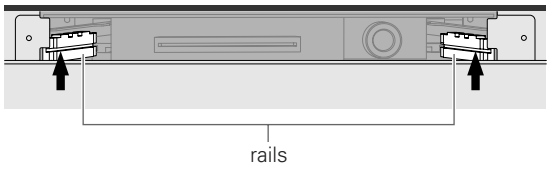
Installation

Illustration depicts PDA-5003 model

① **Remove the protective cover over the video card slot on the Plasma Display's terminal panel.**

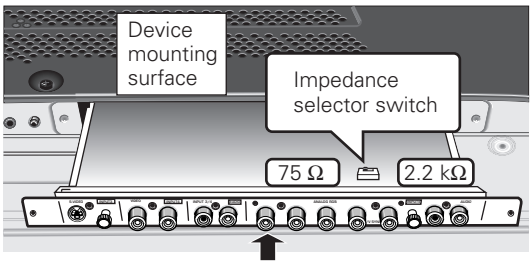


② **Align the video card with the two rails visible inside of the port then gently and evenly insert the card.**

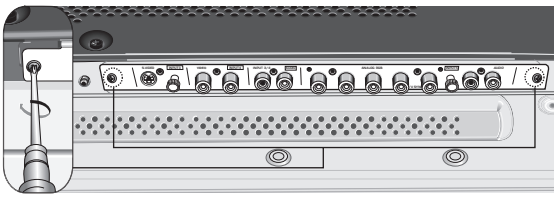


Note

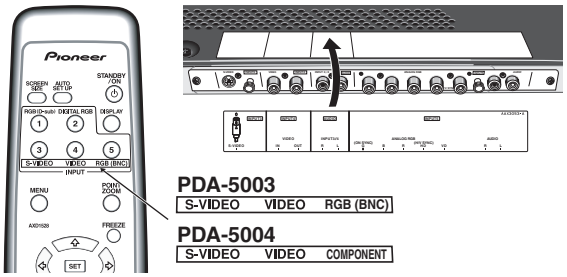
- Be very careful when inserting the card. Aim the card's mounting surface oriented toward the rear of the Plasma Display. The card or display may be damaged if the card is inserted crookedly or with excessive force.
- Impedance selector switch is found only on the PDA-5003.



③ **After inserting the video card all the way into the slot, confirm that it is seated securely. The screws removed in step 1 to secure the card in place.**



④ **Affix the accessory connector indicator label to the Plasma Display then affix the remote control label to the remote control that is furnished with the Plasma Display.**

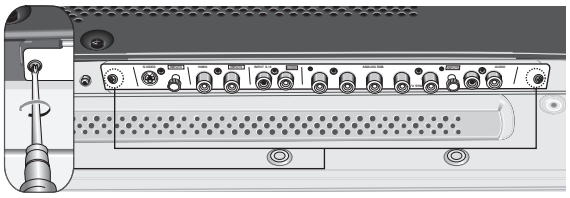


Note

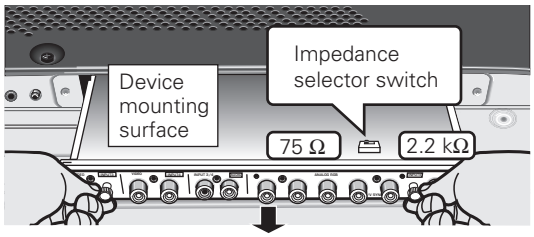
Use a soft cloth to gently wipe away any dust or soiling from the surface before affixing the label.

Video Card Removal (Be careful not to insert and remove it frequently).

① **Remove the two screws holding the video card.**



② **Holding the inside tabs, pull the video card straight out.**



4.4.4 Input connectors on the Plasma Display with video card

■ When using PDA-5003

Consult the following chart when making connections to a Plasma Display equipped with this video card.

Input Connector / Connected component and signals	INPUT 1*1	INPUT 2	INPUT 3	INPUT 4	INPUT 5*1
AV component					
Analog RGB	◯				◯
Component video	◯				◯
S video			◯		
Composite video				◯	
Digital RGB		◯			
Personal computer (PC)					
Analog RGB	◯*2				◯
S video			◯*3		
Composite video				◯*3	
Digital RGB		◯*4			

*1 Although INPUT1 and INPUT5 are compatible with various kinds of signals, setup using the on-screen menu is necessary after connections are made in order match the characteristics of the source component.
*2 INPUT1 is compatible with Microsoft's Plug & Play (VESA DDC 1/2B).
*3 Depending on the video output board of the computer, this type of connection may not be possible.
*4 INPUT2 is compatible with Microsoft's Plug & Play (VESA DDC 2B).

■ When using PDA-5004

Consult the following chart when making connections to a Plasma Display equipped with this video card.

Input Connector / Connected component and signals	INPUT 1*1	INPUT 2	INPUT 3	INPUT 4	INPUT 5*1
AV component					
Analog RGB	◯				◯
Component video	◯				◯
S video			◯		
Composite video				◯	
Digital RGB		◯			
Personal computer (PC)					
Analog RGB	◯*2				◯
S video			◯*3		
Composite video				◯*3	
Digital RGB		◯*4			

*1 Although INPUT1 and INPUT5 are compatible with various kinds of signals, setup using the on-screen menu is necessary after connections are made in order match the characteristics of the source component.
*2 INPUT1 is compatible with Microsoft's Plug & Play (VESA DDC 1/2B).
*3 Depending on the video output board of the computer, this type of connection may not be possible.
*4 INPUT2 is compatible with Microsoft's Plug & Play (VESA DDC 2B).

4.4.5 Connection to INPUT1 and INPUT5

■ When using PDA-5003

Various components can be connected to the INPUT1 and INPUT5 jacks. After connections are made, on-screen setup is necessary to match the characteristics of the connected component.

INPUT5 jack / Output source	[ON SYNC] G	B	R	[H/V SYNC] HD	VD
Video component/ personal computer (PC) with RGB output	◯ G ON SYNC	◯ B	◯ R	✕	✕
	◯ G	◯ B	◯ R	◯ H/V SYNC	✕
	◯ G	◯ B	◯ R	◯ HD	◯ VD
Video component with component video output	◯ Y	◯ P_B/C_B	◯ P_R/C_R	✕	✕

✕ : Do not connect anything. ◯ : Connect to this jack.

Note

Components compatible with INPUT1 are also compatible with INPUT5. When making connections to INPUT1, please refer to the Plasma Display's Operating Instructions.

■ When using PDA-5004

Various components can be connected to the INPUT1 and INPUT5 jack. After connections are made, on-screen setup is necessary to match the characteristics of the connected component.

INPUT5 jack / Output source	Y	P_B/C_B	P_R/C_R
Video component/personal computer (PC) with RGB output	◯ G ON SYNC	◯ B	◯ R
Video component with component video output	◯ Y	◯ P_B/C_B	◯ P_R/C_R

◯ : Connect to this jack.

Note

When making connections to INPUT1, please refer to the Plasma Display's Operating Instructions.

4.4.6 Connection to INPUT1 or INPUT5

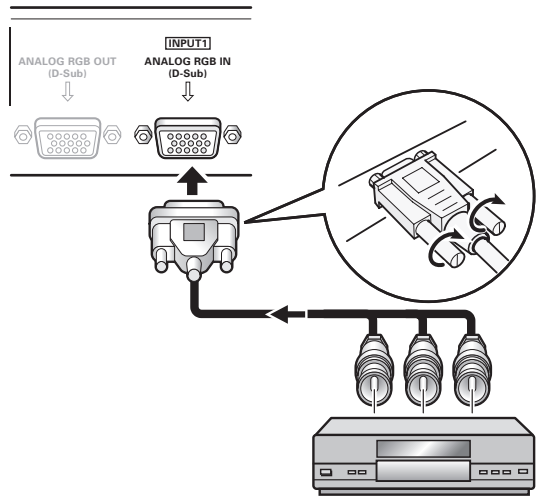
■ **When using PDA-5003**

Connection to AV components —

Connection to AV component equipped with component video jacks

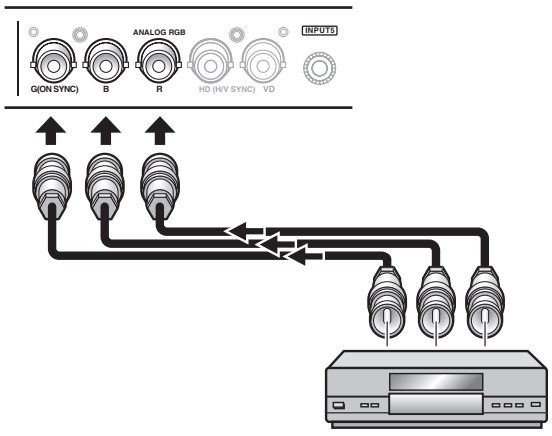
Make component video connections for AV components equipped with component video jacks.

When connecting to ANALOG RGB IN (INPUT1) ——



On-screen setup is necessary after connection.

When connecting to ANALOG RGB (INPUT5) ——



Connect the Y signal to the G jack, the P_B/C_B signal to the B jack, and the P_R/C_R signal to the R jack.
On-screen setup is necessary after connection.

INPUT5 jacks are all BNC jacks.
If necessary, use commercially available BNC/pin-plug conversion adapters to make connections.

Note

The Plasma Display and this Video Card are designed to support component video signals with standard, stable signal levels and sync signals. As a result, some image disruption may be generated during use of various special trick play functions on video components.

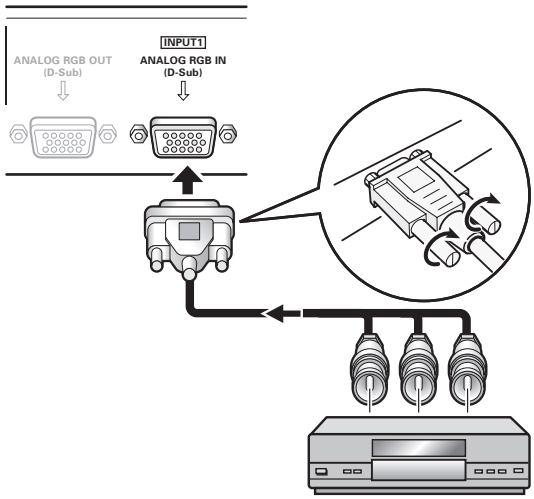
■ **When using PDA-5004**

Connection to AV components —

Connection to AV component equipped with component video jacks

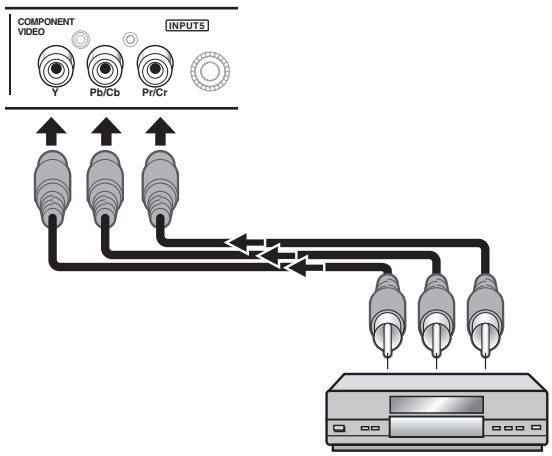
Make component video connections for AV components equipped with component video jacks.

When connecting to ANALOG RGB IN (INPUT1) ——



On-screen setup is necessary after connection.

When connecting to COMPONENT VIDEO (INPUT5) ——



Connect the Y signal to the Y jack, the P_B/C_B signal to the P_B/C_B jack, and the P_R/C_R signal to the P_R/C_R jack.

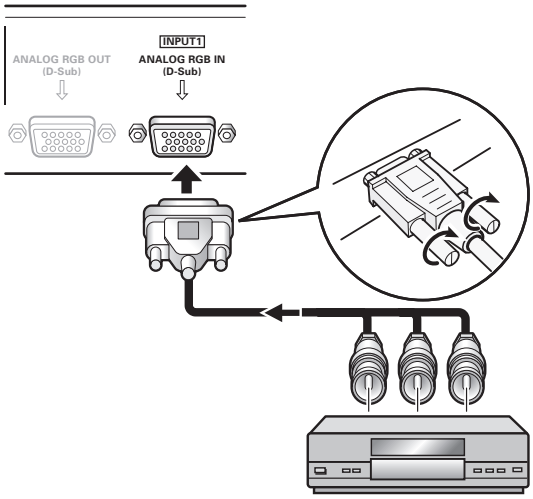
Note

The Plasma Display and this Video Card are designed to support component video signals with standard, stable signal levels and sync signals. As a result, some image disruption may be generated during use of various special trick play functions on video components.

Connection of G ON SYNC analog RGB source

Make G ON SYNC connections for a component with output that has the synchronization signal layered on top of the green signal.

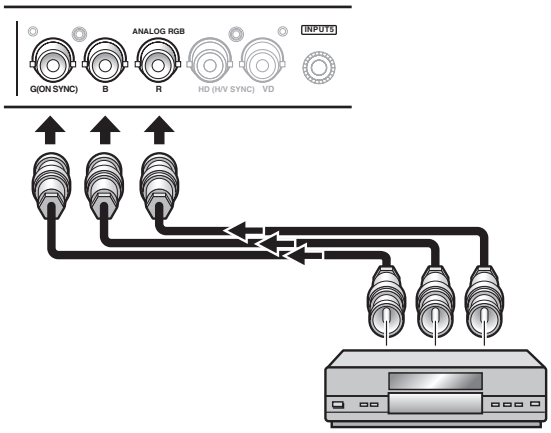
When connecting to ANALOG RGB IN (INPUT1)



On-screen setup is necessary after connection.

When connecting to ANALOG RGB (INPUT5)

[Connections for PDA-5003]

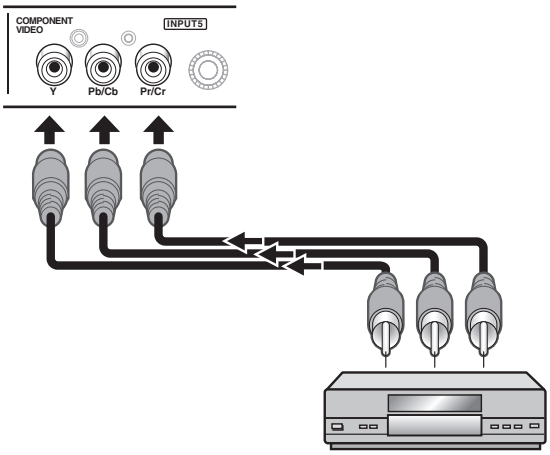


On-screen setup is necessary after connection.

Note

When making G ON SYNC connections, do not make any connections to the VD or HD jacks. If connections are made, the picture may be not displayed normally.

When connecting to COMPONENT VIDEO (INPUT5) · [Connections for PDA-5004]



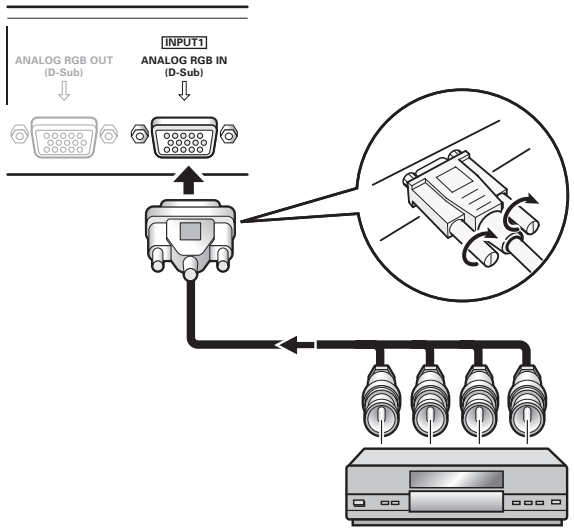
Connect the G ON SYNC signal to the Y jack, the B signal to the P_B/C_B jack, and the R signal to the P_R/C_R jack.

On-screen setup is necessary after connection.

Connection of composite SYNC analog RGB source

Make composite SYNC connections for a component with output that has the vertical synchronization signal layered on top of the horizontal synchronization signal.

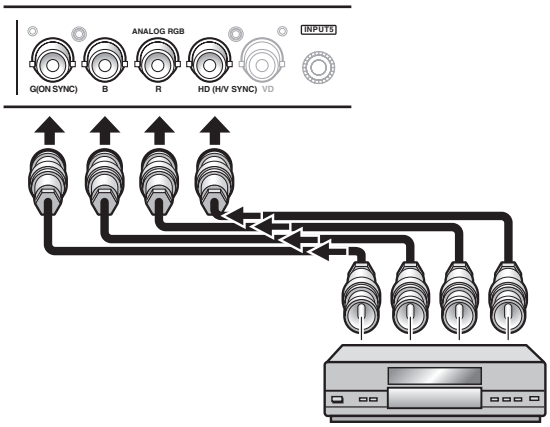
When connecting to ANALOG RGB IN (INPUT1)



On-screen setup is necessary after connection.

When connecting to ANALOG RGB (INPUT5)

[Connections for PDA-5003]



When using INPUT5, set the impedance selector switch to match the output impedance of the connected component's synchronization signal.
When the output impedance of the sync signal is below 75 Ω remove the video card and set the impedance selector switch to 75 Ω.

On-screen setup is necessary after connection.

Note

When making composite SYNC connections, do not connect anything to the VD jack. If connected to, the picture may not be displayed properly.

Connection to a personal computer

Connection method differs depending on the computer type. When connecting, please thoroughly read the computer's operating instructions.

Before making connections, be sure to make sure that the personal computer's power and display's main power is off.

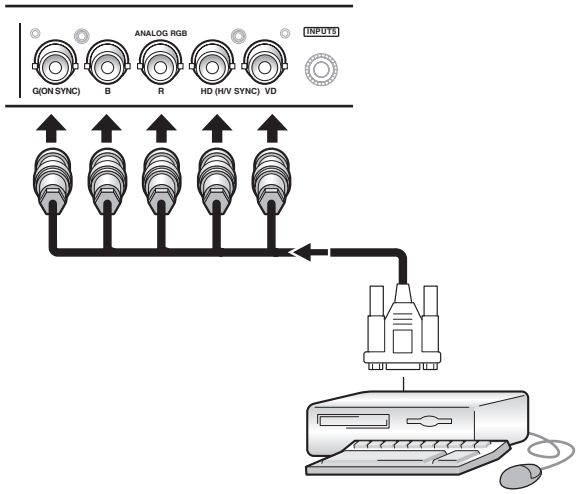
For the PC input signals and screen sizes that the display is compatible with, please refer to the Plasma Display's Operating Instructions.

Connection of separate SYNC analog RGB source

Make separate SYNC connections for a personal computer that has RGB output separated into 5 output signals: green, blue, red, horizontal synchronization signal, and vertical synchronization signal.

When connecting to ANALOG RGB (INPUT5)

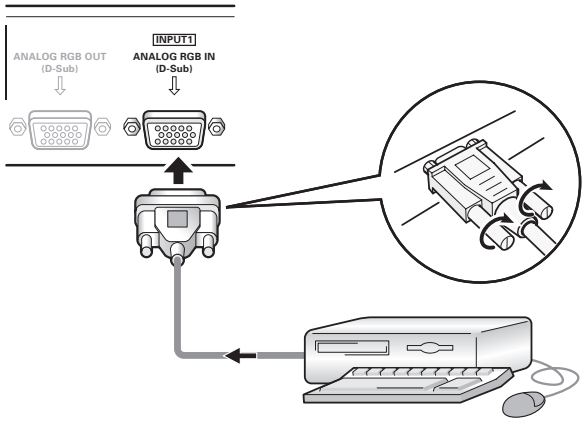
[Connections for PDA-5003]



When using INPUT5, set the impedance selector switch to match the output impedance of the connected computer's synchronization signal.
When the output impedance of the sync signal is below 75 Ω remove the video card and set the impedance selector switch to 75 Ω.

On-screen setup is necessary after connection.

When connecting to ANALOG RGB IN (INPUT1)

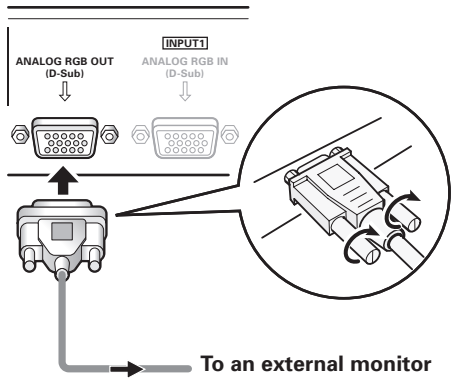


Connect the cable corresponding to the shape of the input terminal on the display and the personal computer's output terminal.
Secure by tightening the terminal screws on both units.

On-screen setup is necessary after connection.

Note
Depending on the type of computer model being connected, a conversion connector or adapter etc. provided with the computer or sold separately may be necessary.
For details, please read your PC's instruction manual or consult the maker or nearest dealer of your computer.

When connecting to ANALOG RGB OUT (INPUT1)



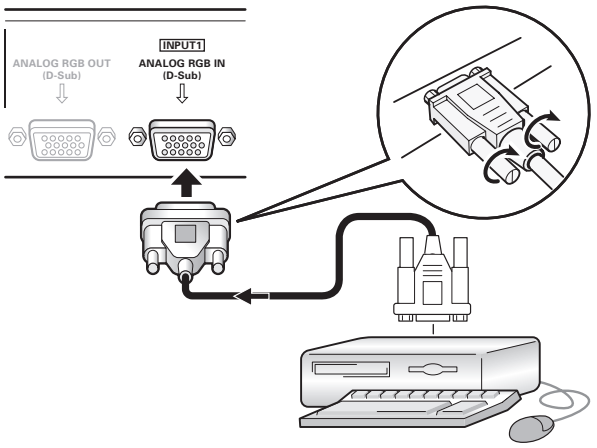
With the Plasma Display, it is possible to output the video signal to an external monitor or other component from the ANALOG RGB OUT (INPUT1) terminal.

Note
A video signal will not be output from the ANALOG RGB OUT (INPUT1) terminal when the main power of this unit is off or in standby.

Connection of G ON SYNC analog RGB source

Make G ON SYNC connections for a personal computer with output that has the synchronization signal layered on top of the green signal.

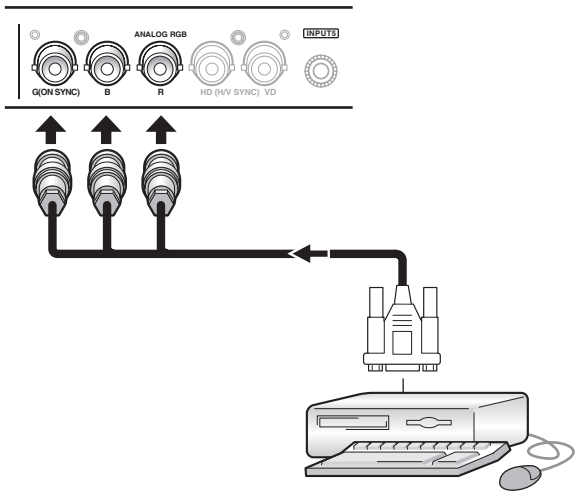
When connecting to ANALOG RGB IN (INPUT1)



On-screen setup is necessary after connection.

When connecting to ANALOG RGB (INPUT5)

[Connections for PDA-5003]

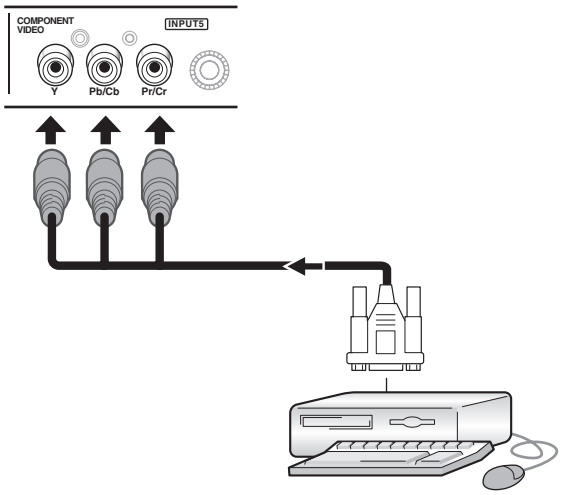


On-screen setup is necessary after connection.

Note
When making G ON SYNC connections, do not make any connections to the VD or HD jacks. If connections are made, the picture may be not displayed normally.

When connecting to COMPONENT VIDEO (INPUT5)

[Connections for PDA-5004]

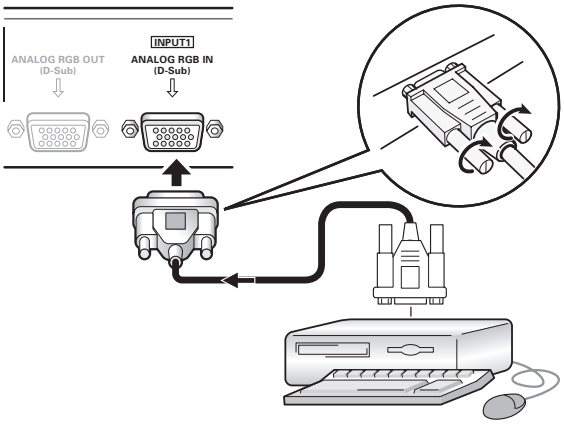


On-screen setup is necessary after connection.

Connection of composite SYNC analog RGB source

Make composite SYNC connections for a personal computer with output that has the vertical synchronization signal layered on top of the horizontal synchronization signal.

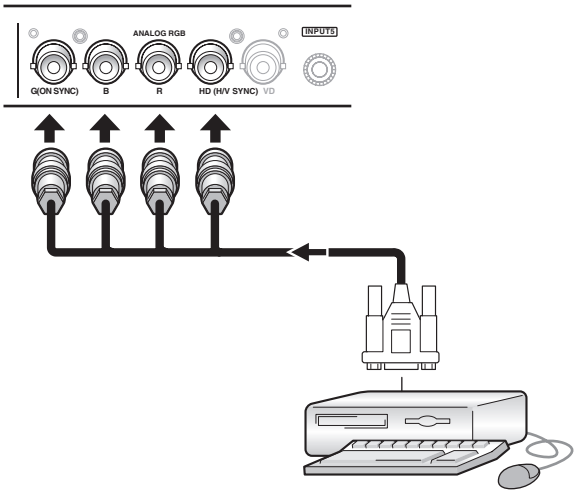
When connecting to ANALOG RGB IN (INPUT1)



On-screen setup is necessary after connection.

When connecting to ANALOG RGB (INPUT5)

[Connections for PDA-5003]



When using INPUT5, set the impedance selector switch to match the output impedance of the connected computer's synchronization signal.
When the output impedance of the sync signal is below 75 Ω remove the video card and set the impedance selector switch to 75 Ω.

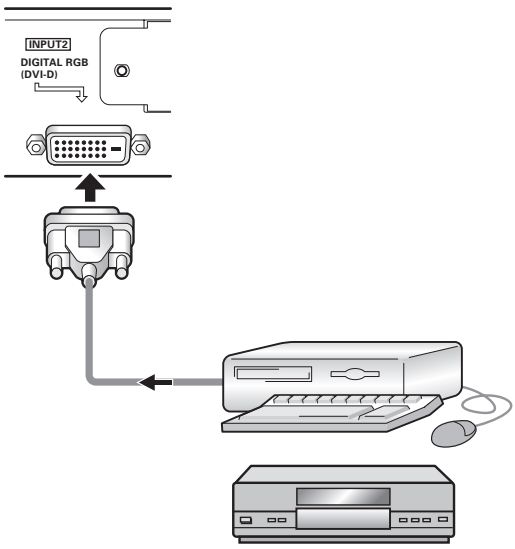
On-screen setup is necessary after connection.

Notes

- When making composite SYNC connections, do not connect anything to the VD jack. If connected to, the picture may not be displayed properly.
- Some types of computer devices manufactured by Apple Computer, Inc. are equipped with both G ON SYNC and composite SYNC outputs. This type of component should be connected using the G ON SYNC connection.

4.4.7 Connection to INPUT2

A computer equipped with DVI output (digital RGB signal) or an AV component equipped with DVI output, can be connected to the Plasma Display's DVI connector.



Computer or AV component

On-screen setup is necessary after connection.

Note

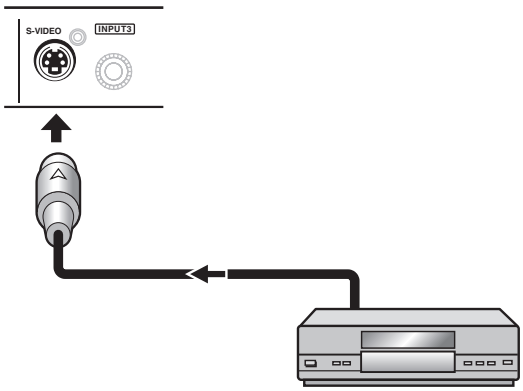
Use a DVI-D 24-pin (digital only) cable for the connection.

NOTICE

- INPUT2 is compatible with Microsoft's Plug & Play (VESA DDC 2B).
- For screen sizes and input signals compatible with INPUT2, please refer to the Plasma Display's Operation Instructions.

4.4.8 Connection to INPUT3

Connect an AV component that has S-video output jack to the video card's S-VIDEO (INPUT3) jack.



AV component

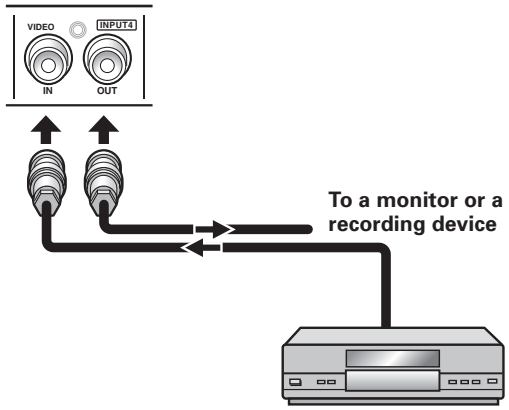
4.4.9 Connection to INPUT4

Connect an AV component that has a video output jack to the video card's INPUT4 jack. The VIDEO OUT (INPUT4) jack can be used to output the video signal to a separate monitor, recording device or other component with video input capability.

Note

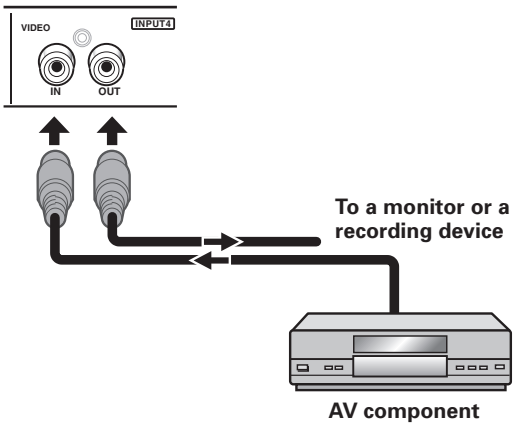
A video signal will not be output from the VIDEO OUT (INPUT4) jack when the main power of this display is off or in standby mode.

[When using PDA-5003]



AV component

[When using PDA-5004]



AV component

Signals to the INPUT3 and INPUT4 jacks are all compatible with the following TV systems: NTSC, PAL, SECAM, 4.43NTSC, PAL M and PAL N.

4.4.10 About DTV set top box connection

To ensure proper connection, please carefully read the instruction manual supplied with the DTV set top box.

The set top box output signals that this display is compatible with are as follows.

Video signal type	Video signal	Video signal format	Jacks where connection is possible				
			INPUT1	INPUT2	INPUT3	INPUT4	INPUT5
HDTV	1125i (1080i) 750p (720p)	Component	◎				◎
		RGB	◎	◎			◎
SDTV	525i (480i) 625i (575i)	Composite				◎	
		S Video			◎		
		Component	◎				◎
		RGB	◎				◎
	525p (480p) 625p (575p)	Component	◎				◎
		RGB	◎	◎			◎

4.4.11 Audio connections

Before making connections, be sure to check that the audio component's power and the display's main power is off.

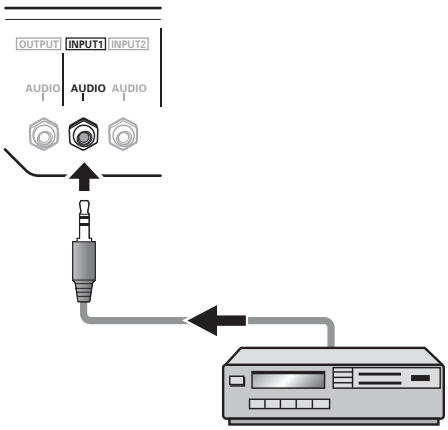
Connect an audio component to the audio input jack of the Plasma Display with installed video card.

When the video card is installed, the Plasma Display provides four or five audio input jacks and one audio output jack. Consult the following chart to choose the proper audio input for each video input.

Video input	Audio input	Sound output
INPUT1	Stereo mini jack (L/R)	Sound of the selected video input is output from the • SPEAKER (L/R) terminals • Stereo mini jack (L/R).
INPUT2	Stereo mini jack (L/R)	
INPUT5	Pin jacks (L/R)	
INPUT3	Pin jacks (L/R) *1	
INPUT4	Pin jacks (L/R) *1	

*1 When using the PDA-5003, the INPUT3 and INPUT4 audio input connectors are shared.

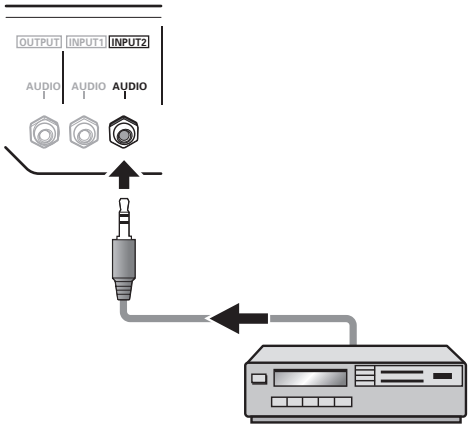
Audio connection for component connected to INPUT1



A stereo miniplug cable can be used to connect the audio output from the component connected to INPUT1, to the Plasma Display's AUDIO (INPUT1) jack (L/R).

Sound is output from both the AUDIO (OUTPUT) stereo mini jack (L/R) and the SPEAKER (L/R) terminals according to the video input selection.

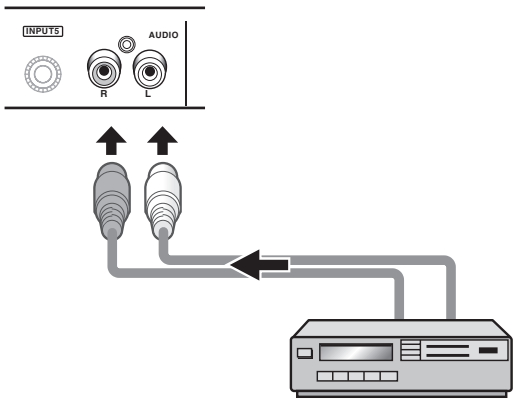
Audio connections for component connected to INPUT2



A stereo miniplug cable can be used to connect the audio output from the component connected to INPUT2, to the Plasma Display's AUDIO (INPUT2) jack (L/R).

Sound is output from both the AUDIO (OUTPUT) stereo mini jack (L/R) and the SPEAKER (L/R) terminals according to the video input selection.

Audio connection for component connected to INPUT5

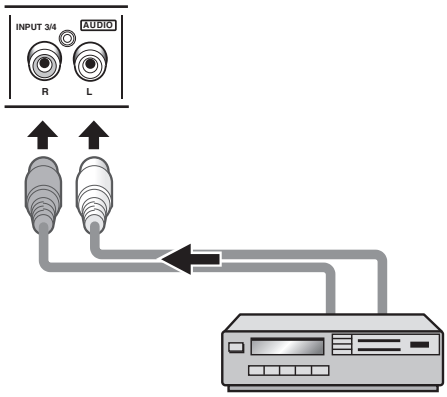


The audio line for the component connected to INPUT5 can be connected to the AUDIO R/L (INPUT5) pin jacks.

Sound is output from both the AUDIO (OUTPUT) stereo mini jack (L/R) and the SPEAKER (L/R) terminals according to the video input selection.

[When using PDA-5003]

Audio connection for component connected to INPUT3 or INPUT4

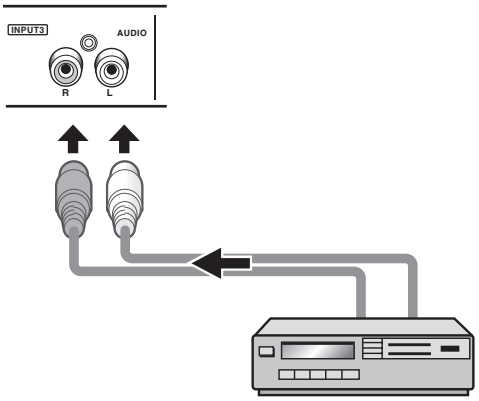


Audio input to the AUDIO R/L (INPUT3/4) pin jacks is possible for a component connected to either INPUT3 or INPUT4.

Sound is output from both the AUDIO (OUTPUT) stereo mini jack (L/R) and the SPEAKER (L/R) terminals according to the video input selection.

[When using PDA-5004]

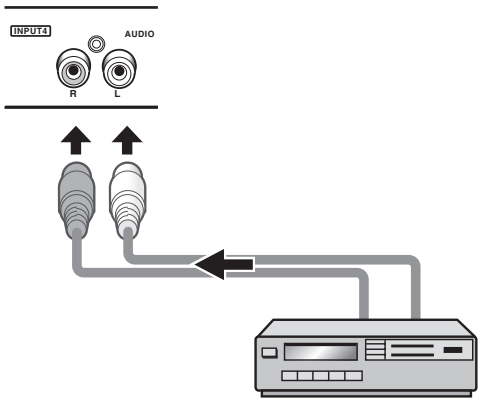
Audio connection for component connected to INPUT3



The audio line for the component connected to INPUT3 can be connected to the AUDIO R/L (INPUT3) pin jacks.

Sound is output from both the AUDIO (OUTPUT) stereo mini jack (L/R) and the SPEAKER (L/R) terminals according to the video input selection.

Audio connection for component connected to INPUT4



The audio line for the component connected to INPUT4 can be connected to the AUDIO R/L (INPUT4) pin jacks.

Sound is output from both the AUDIO (OUTPUT) stereo mini jack (L/R) and the SPEAKER (L/R) terminals according to the video input selection.

INPUT Response Signals

INPUT 1, 5

■ Video signals supported ★ (applies only when equipped with PDA-5003/PDA-5004)

Vertical Frequency Fv (Hz)	Horizontal Frequency Fh (kHz)	Signal Format	Remark
50	15.625	Component RGB	625i(576i)/SDTV
	28.13	Component RGB	1125i(1080i)/HDTV
	31.25	Component RGB	625p(576p)/SDTV
	37.50	Component RGB	750p(720p)/HDTV
	56.20	Component RGB	1125p(1080p)/HDTV
	62.50	Component RGB	520i(480i)/SDTV
60	15.734	Component RGB	525i(480i)/SDTV
	31.5	Component RGB	525p(480p)/SDTV
	33.75	Component RGB	1125i(1080i)/HDTV 1125i(1035i)/HDTV
	45.0	Component RGB	750p(720p)/HDTV
	67.5	Component RGB	1125p(1080p)/HDTV

■ PC signals supported

Resolution (Dot x Line)	Refresh rate		Remark
	Vertical	Horizontal	
640x400	70.1 Hz	31.5 kHz	NEC PC-9800
720x400	70.1 Hz	31.5 kHz	NEC PC-9800
	85.1 Hz	37.9 kHz	
640x480	59.9 Hz	31.5 kHz	
	66.7 Hz	35.0 kHz	Apple Macintosh 13"
	72.8 Hz	37.9 kHz	
	75 Hz	37.5 kHz	
	85 Hz	43.3 kHz	
	100.4 Hz	51.1 kHz	I/O DATA
	120.4 Hz	61.3 kHz	I/O DATA
848x480	60 Hz	31.0 kHz	
852x480	60 Hz	31.7 kHz	
800x600	56.3 Hz	35.2 kHz	
	60.3 Hz	37.9 kHz	
	72.2 Hz	48.1 kHz	
	75 Hz	46.9 kHz	
	85.1 Hz	53.7 kHz	
	99.8 Hz	63.0 kHz	I/O DATA
	120 Hz	75.7 kHz	I/O DATA
832x624	74.6 Hz	49.7 kHz	Apple Macintosh 16"
1024x768	60 Hz	48.4 kHz	
	60 Hz	49.7 kHz	Work station (SGI)
	70.1 Hz	56.5 kHz	
	75 Hz (74.9 Hz)	60.0 kHz (60.2 kHz)	( ) indicates Apple Macintosh 19
	85 Hz	68.7 kHz	
	100.6 Hz	80.5 kHz	I/O DATA
	119.4 Hz	95.5 kHz	
1280x768	56.2 Hz	45.1 kHz	
	59.8 Hz	48 kHz	
	69.8 Hz	56 kHz	
1360x765	60 Hz	47.7 kHz	
1360x768	60 Hz	47.7 kHz	I/O DATA
1376x768	59.9 Hz	48.3 kHz	I/O DATA
1280x800	59.8 Hz	49.7 kHz	CVT
1280x854	60 Hz	53.1 kHz	PC
1152x864	60 Hz	53.7 kHz	
	72 Hz	64.9 kHz	
	75 Hz	67.5 kHz	
1152x870	75.1 Hz	68.7 kHz	Apple Macintosh 21"
1152x900	66 Hz	61.8 kHz	Sun Microsystems LO
	76 Hz	71.7 kHz	Sun Microsystems HI
1440x900	59.9 Hz	55.9 kHz	Apple Macintosh 17"
1280x960	60 Hz	60.0 kHz	
	85 Hz	85.9 kHz	
1280x1024	60 Hz	63.9 kHz	Work station (SGI)
	60 Hz	64.0 kHz	
	60 Hz	64.6 kHz	Work station (EWS4800)
	71.2 Hz	75.1 kHz	Work station (EWS4800)
	72 Hz	78.1 kHz	Work station (HP)
	75 Hz	80.0 kHz	
	76.1 Hz	81.1 kHz	Work station (SUN)
	85 Hz	91.1 kHz	
	100.1 Hz	108.5 kHz	I/O DATA
1400x1050	60 Hz	65.3 kHz	
	74.9 Hz	82.3 kHz	
	85 Hz	93.9 kHz	
1680x1050	60 Hz	65.3 kHz	
1600x1200	60 Hz	75.0 kHz	
	65 Hz	81.3 kHz	
	70 Hz	87.5 kHz	
	75 Hz	93.8 kHz	
	85 Hz	106.3 kHz	
1920x1200	59.9 Hz	74.6 kHz	CVT
1920x1200RB	60 Hz	74.0 kHz	CVT

INPUT 2

■ Video signals supported ★ (applies only when equipped with PDA-5003/PDA-5004)

Vertical Frequency Fv (Hz)	Horizontal Frequency Fh (kHz)	Signal Format	Remark
50	28.13	RGB	1125i(1080i)/HDTV
	31.25	RGB	625p(576p)x720 dot/SDTV
	37.50	RGB	750p(720p)/HDTV
60	31.5	RGB	525p(480p)x720 dot/SDTV
	33.75	RGB	1125i(1080i)/HDTV
	45.0	RGB	750p(720p)/HDTV

The following signals are not formally supported, but can be displayed (They are not recorded in EDID data).

Vertical Frequency Fv (Hz)	Horizontal Frequency Fh (kHz)	Signal Format	Remark
50	15.6	RGB	625i(576i)/SDTV
	56.25	RGB	1125p(1080p)/HDTV
60	15.8	RGB	525i(480i)/SDTV
	31.5	RGB	525p(480p)x640 dot/SDTV
	67.5	RGB	1125p(1080p)/HDTV
50	62.5	RGB	1250p/HDTV

* They may not be displayed normally depending on the connected device.

■ PC signals supported

Resolution (Dot x Line)	Refresh rate		Remarks
	Vertical	Horizontal	
640x480	59.9 Hz	31.5 kHz	
	72.8 Hz	37.9 kHz	
	75 Hz	37.5 kHz	
	85 Hz	43.3 kHz	
	100.4 Hz	51.1 kHz	
	120.4 Hz	61.3 kHz	
720x400	70.1 Hz	31.5 kHz	NEC PC-9800
	85.1 Hz	37.9 kHz	
848x480	60 Hz	31.0 kHz	
852x480	60 Hz	31.7 kHz	
800x600	56.3 Hz	35.2 kHz	
	60.3 Hz	37.9 kHz	
	72.2 Hz	48.1 kHz	
	75 Hz	46.9 kHz	
	85.1 Hz	53.7 kHz	
	99.8 Hz	63.0 kHz	
	120 Hz	75.7 kHz	
1024x768	60 Hz	48.4 kHz	
	60 Hz	49.7 kHz	Work station (SGI)
	70.1 Hz	56.5 kHz	
	75 Hz	60.0 kHz	
	85 Hz	68.7 kHz	
	100.6 Hz	80.5 kHz	
	119.4 Hz	95.5 kHz	
1280x768	56.2 Hz	45.1 kHz	
	59.8 Hz	48 kHz	
	69.8 Hz	56 kHz	
1280x800	59.8 Hz	49.7 kHz	
1280x854	60 Hz	53.1 kHz	
1360x768	60 Hz	47.7 kHz	I/O DATA
1376x768	59.9 Hz	48.3 kHz	I/O DATA
1152x864	60 Hz	53.7 kHz	
	72 Hz	64.9 kHz	
	75 Hz	67.5 kHz	
1152x900	66 Hz	61.8 kHz	Sun Microsystems LO
	76 Hz	71.7 kHz	Sun Microsystems HI
1440x900	59.9 Hz	55.9 kHz	Apple Macintosh17“
1280x960	60 Hz	60.0 kHz	
	85 Hz	85.9 kHz	
	60 Hz	63.9 kHz	Work station (SGI)
1280x1024	60 Hz	64.0 kHz	
	60 Hz	64.6 kHz	Work station (EWS4800)
	71.2 Hz	75.1 kHz	Work station (EWS4800)
	72 Hz	78.1 kHz	Work station (HP)
	75 Hz	80.0 kHz	
	76.1 Hz	81.1 kHz	Work station (SUN)
	85 Hz	91.1 kHz	
1400x1050	60 Hz	65.3 kHz	
	74.9 Hz	82.3 kHz	
1680x1050	60 Hz	65.3 kHz	
1920x1080	50 Hz	56.2 kHz	
	60 Hz	67.5 kHz	
1600x1200	60 Hz	75.0 kHz	
1920x1200RB	60 Hz	74.0 kHz	CVT

INPUT 3★

(applies only when equipped with PDA-5003/PDA-5004):

Y/C Separate video signal NTSC, PAL, SECAM, 4.43 NTSC, PAL M, PAL N

INPUT 4★

(applies only when equipped with PDA-5003/PDA-5004):

Composite video signal NTSC, PAL, SECAM, 4.43 NTSC, PAL M, PAL N

4.5 Table Top Stand: PDK-TS07

4.5.1 Specifications

External dimensions ..... 566 mm (W) × 508 mm (H) × 339 mm (D)
(22-9/32 in. (W) × 20 in. (H) × 13-11/32 in. (D))
Weight ..... 4.0 kg (8.8 lbs.) (mounting hardware only)
39.5 kg (87.1 lbs.) (mounting hardware and Plasma Display <PDP-507CMX>)
34.5 kg (76.1 lbs.) (mounting hardware and Plasma Display <PDP-427CMX>)
Materials ..... Base: plastic (ABS); Stand pipes: general structural steel tubes (STKMR-D)
Finish ..... Finish: Base: paint (Pioneer original color); Stand pipes: semi-matt black paint
Package dimensions ..... 640 mm (W) × 214 mm (H) × 415 mm (D)
(25-3/16 in. (W) × 8-7/16 in. (H) × 16-11/32 in. (D))
Package weight ..... 6.2 kg (13.7 lbs.)
Layers of packing ..... 10 layers

Accessories

Base cover ..... × 1
Stand pipes (left and right interchangeable) ..... × 2
Screws (4 mm × 8 mm) ..... × 4
Installation bolts ① (M8 × 20 mm) ..... × 2
Installation bolts ② (M8 × 40 mm) ..... × 2
Hexagonal wrench (opposite side 5 mm for M8 use) .... × 1
Stabilization bolts (eye screw) ..... × 2
Operating instructions ..... × 1

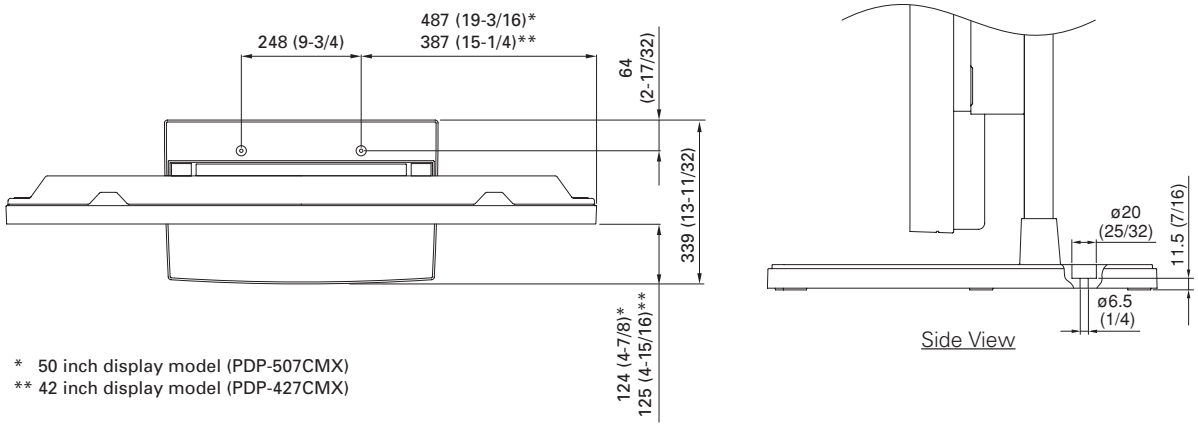
☆ **Operating Temperature Restrictions**
- Ambient Temperature: 0 °C to 40 °C

☆ **Operating temperature restrictions for when the speaker system (PDP-S53-LR, PDP-S56-LR) is attached.**
- Ambient temperature: 0 °C to 40 °C

☆ **Other factors**
- Maintain sufficient clearance between the display and the wall (at least 100 mm)

4.5.2 Installation coordinates for screws used to attach the stand to a surface

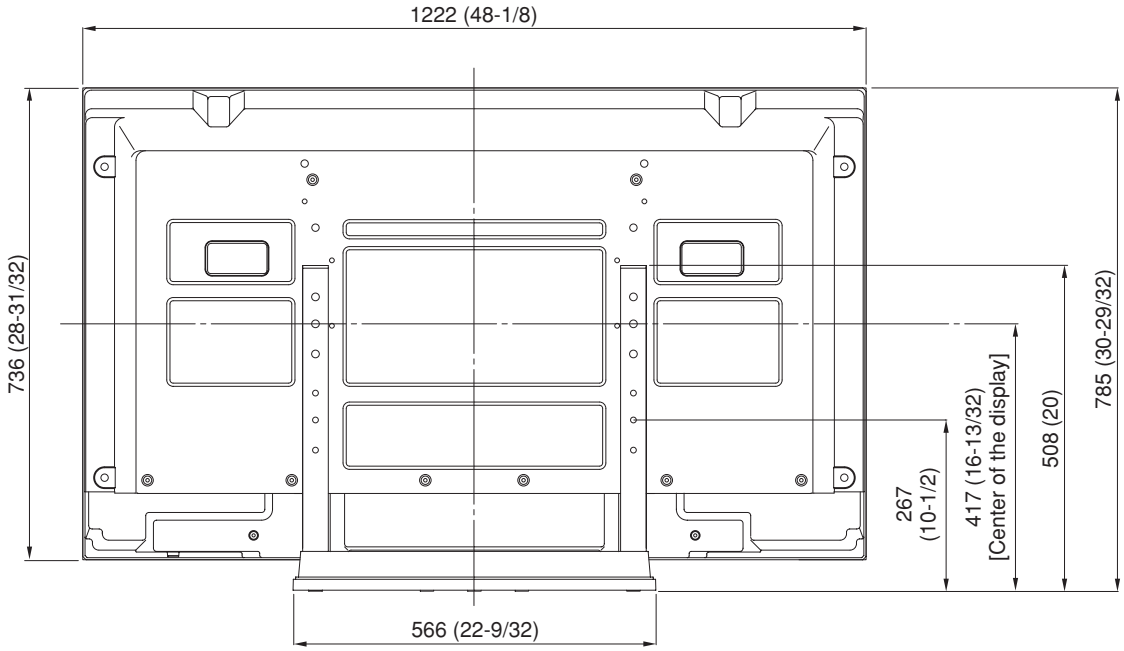
* When stabilizing the stand to a surface, use M6 longer than 20 mm.
Unit: mm (inch)



4.5.3 External Dimensions

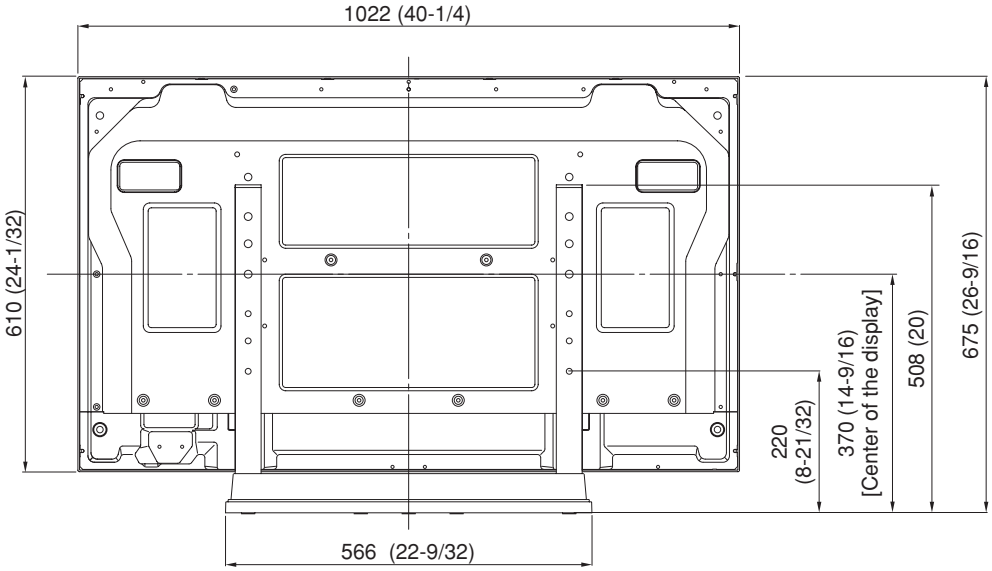
■ When using Plasma Display PDP-507CMX

Unit: mm (inch)



■ When using Plasma Display PDP-427CMX

Unit: mm (inch)



4.5.4 Stand assembling

1) Assembling Steps

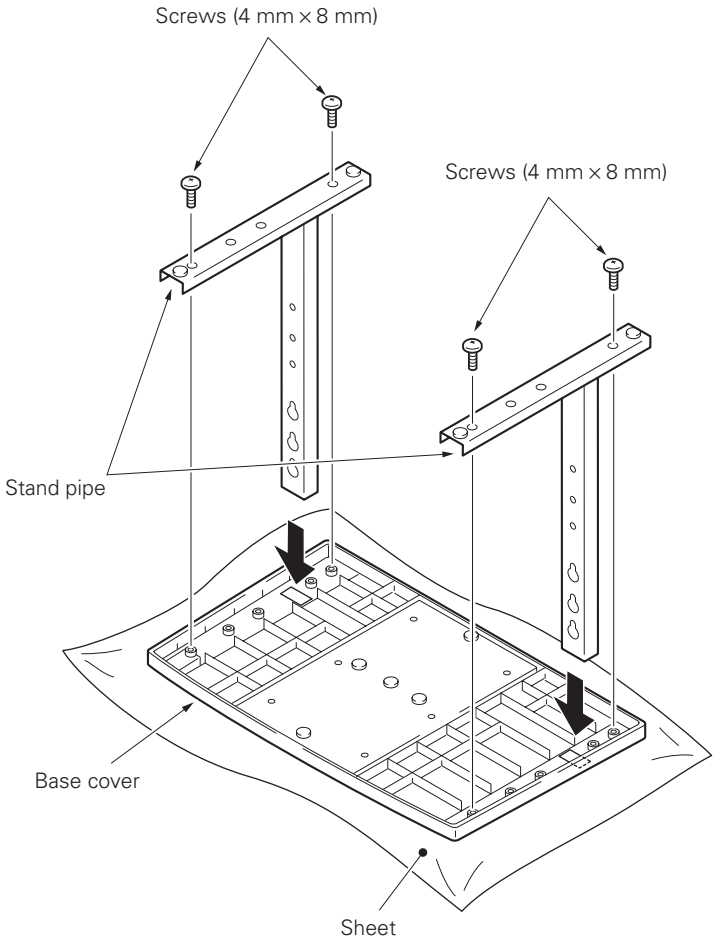
① Turn the base cover over so that the bottom is facing up.

② Insert the stand pipes into the base cover.

③ Use the included screws (4 mm × 8 mm) to stabilize the stand pipes.

Note

Assemble the stand with a soft sheet placed under the base cover.
If a sheet is not laid before assembly, the front surface of the base cover may be scratched.



4.5.5 Attaching the Stand to the Plasma Display

Caution

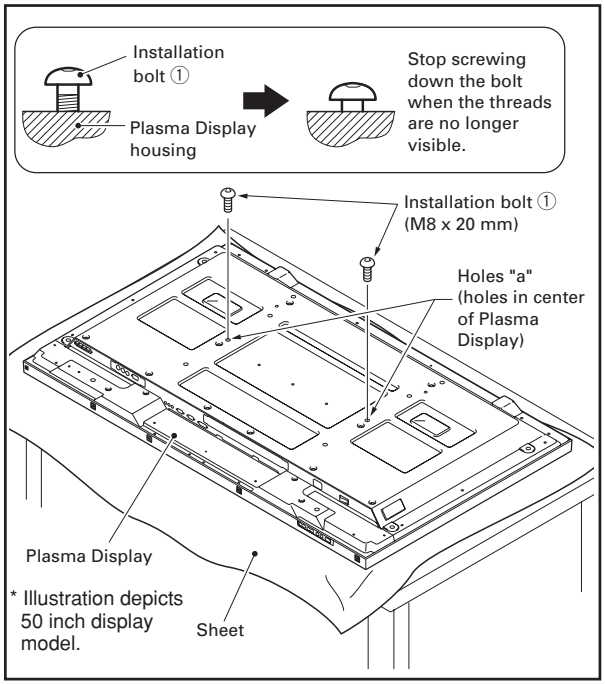
The Plasma Display is heavy, has no depth, and is unstable, so be sure to have at least two people assemble and install it.

Note

- **Insert the bolts in the holes vertically.**
- **Place a sheet or protective cover to protect the display from scratches or damage.**
- **Assemble only with the Plasma Display lying flat on a table or similar surface.**

① With the Plasma Display lying flat, insert and secure the two Installation bolts ① (M8 x 20 mm) in the holes "a" located in center of the Plasma Display housing.

At this point, tighten these bolts ① only until the threads are no longer visible when viewed from the side (you will be unable to attach the display if the bolts are screwed in completely).


Installation bolt ①
Plasma Display housing
Stop screwing down the bolt when the threads are no longer visible.
Installation bolt ① (M8 x 20 mm)
Holes "a" (holes in center of Plasma Display)
Plasma Display
* Illustration depicts 50 inch display model.
Sheet

Note

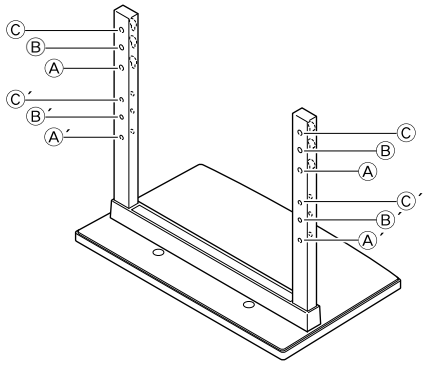
When laying down the Plasma Display, be careful so as to not scratch or damage it.

Table. Regarding the stand pipe bolt holes when the stand is used as a desktop stand

Plasma Display model	Bolt holes used with stand orientation
50 inch display model	Ⓑ, Ⓑ'
43 inch display model	Ⓐ, Ⓐ'
42 inch display model	Ⓐ, Ⓐ'

Note

Ⓒ and Ⓒ' indicate bolt holes for optional components that are sold separately.



② Hook the stand pipe holes Ⓑ onto the bolt heads of the installation bolts ①, then slide the stand upwards to the Plasma Display until it engages the installation bolts ①.

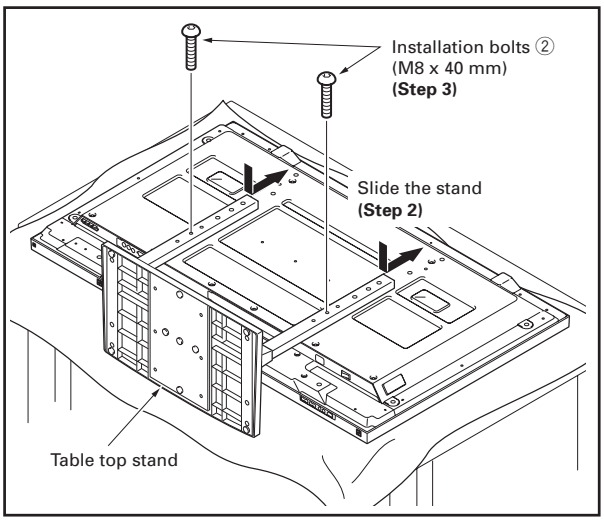
It slides no more than 19 mm (3/4 inch) because of the structure of the stand.

③ Pass the installation bolts ② (M8 x 40 mm) through the stand pipe holes Ⓑ', and then screw them into the main Plasma Display with the accessory hexagonal wrench.

- Move the stand so that the stand screw holes and the nuts that connect the main display line up correctly.
- Be sure to tighten the bolts securely.

④ Tighten the installation bolts ① firmly with the accessory hexagonal wrench.

Be sure to tighten the bolts securely.



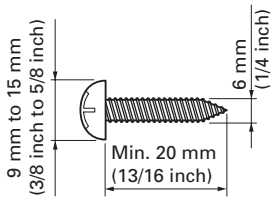
After attachment, take measures to prevent it from falling over.

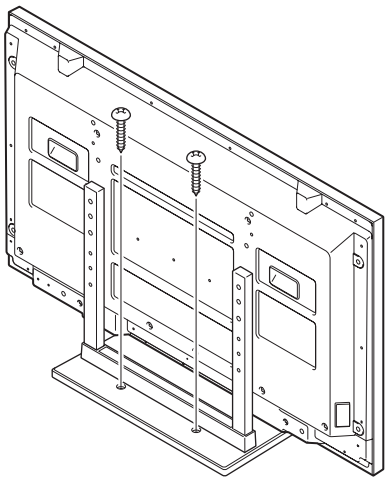
■ Stabilizing on the floor

Stabilize the equipment as shown in the diagram using screws that are available on the market.

Note

To stabilize the equipment on the floor, use screws that have a nominal diameter of 6 mm (1/4 inch) and that are at least 20 mm (13/16 inch) long.





■ Using a wall for stabilization

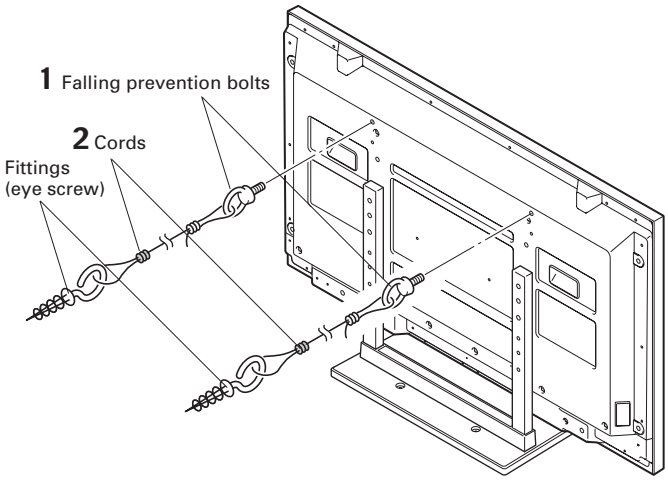
① Attaching the accessory falling prevention bolts (hooks) to the Plasma Display (two locations).

② Using strong cords to firmly stabilize it appropriately and firmly to a wall, pillar, or other sturdy element.

Perform this work in the same way on the left and right sides.

Note

Use cords and fittings (eye screw) that are available on the market.



4.6 Tilt Mount Unit: PDK-5011

4.6.1 Specifications

External dimensions ..... 1222 mm (W) × 736 mm (H) × 144 mm (D) (48-1/8 in. (W) × 28-31/32 in. (H) × 5-21/32 in. (D))
(mounting hardware and Plasma Display <PDP-507CMX>)
1022 mm (W) × 610 mm (H) × 143 mm (D) (40-1/4 in. (W) × 24-1/32 in. (H) × 5-5/8 in. (D))
(mounting hardware and Plasma Display <PDP-427CMX>)

Weight ..... 13.8 kg (30.4 lbs.) (mounting hardware only)
49.3 kg (108.7 lbs.) (mounting hardware and Plasma Display <PDP-507CMX>)
44.3 kg (97.7 lbs.) (mounting hardware and Plasma Display <PDP-427CMX>)

Materials ..... General structural steel tubes (STKM-R), SS400, SPHC

Finish ..... Semi-matte black paint on rear (Original Pioneer color)

Dimensions of packaging ..... 890 mm (W) × 120 mm (H) × 700 mm (D)
(35-1/32 in. (W) × 4-23/32 in. (H) × 27-9/16 in. (D))

Package weight ..... 18.0 kg
(39.7 lbs.)

Layers of packing ..... 20 layers

Components

Tilt mount unit ..... × 1
Bolts M8 ..... × 6
Hexagonal wrench ..... × 1

☆ **Operating Temperature Restrictions**
- Ambient temperature: 0 °C to 40 °C

☆ **Operating Temperature Restrictions for Upside-Down Installations**

* Upside-Down Installation is unavailable with the PDK-5011.

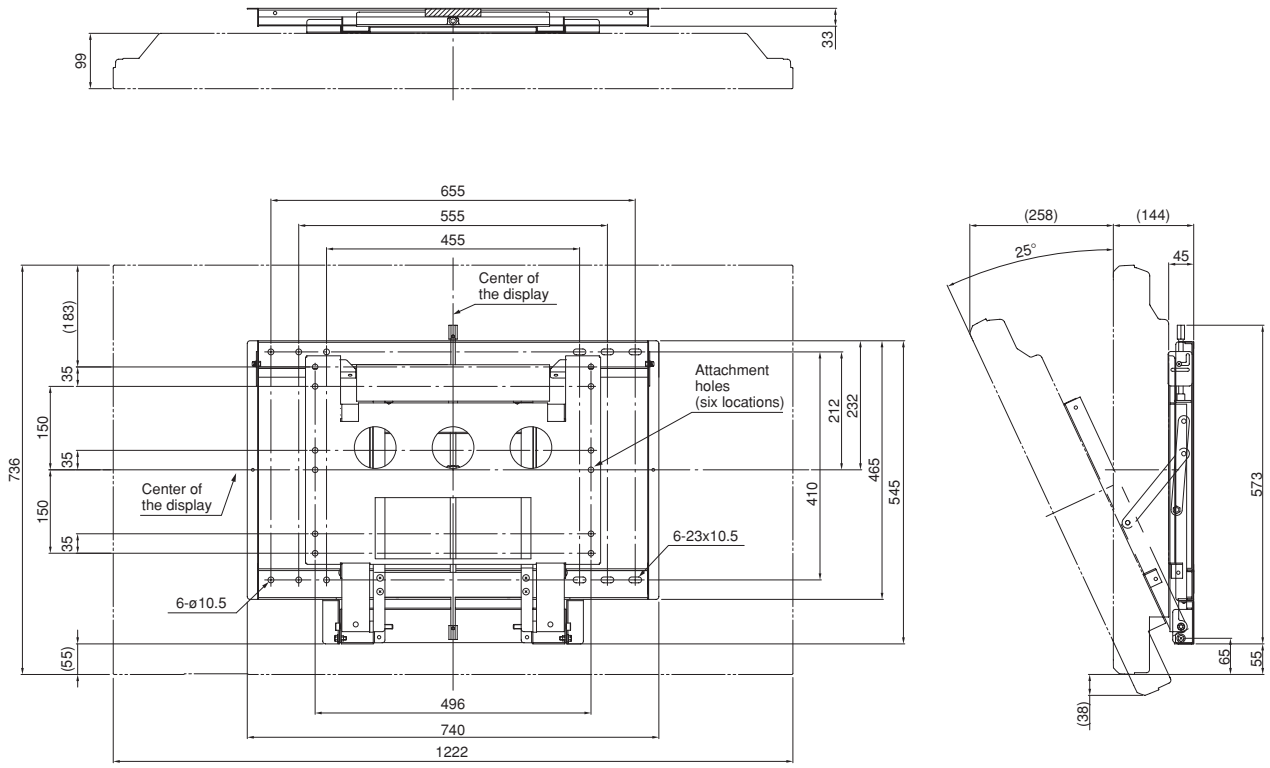
☆ **Operating temperature restrictions for when the speaker system (PDP-S53-LR, PDP-S56-LR) is attached.**
- Ambient temperature: 0 °C to 40 °C

For wall-mounting, allow adequate space (a clearance of 300 mm or more) above and below the panel, as well as on the right and the left.

4.6.2 External Dimensions

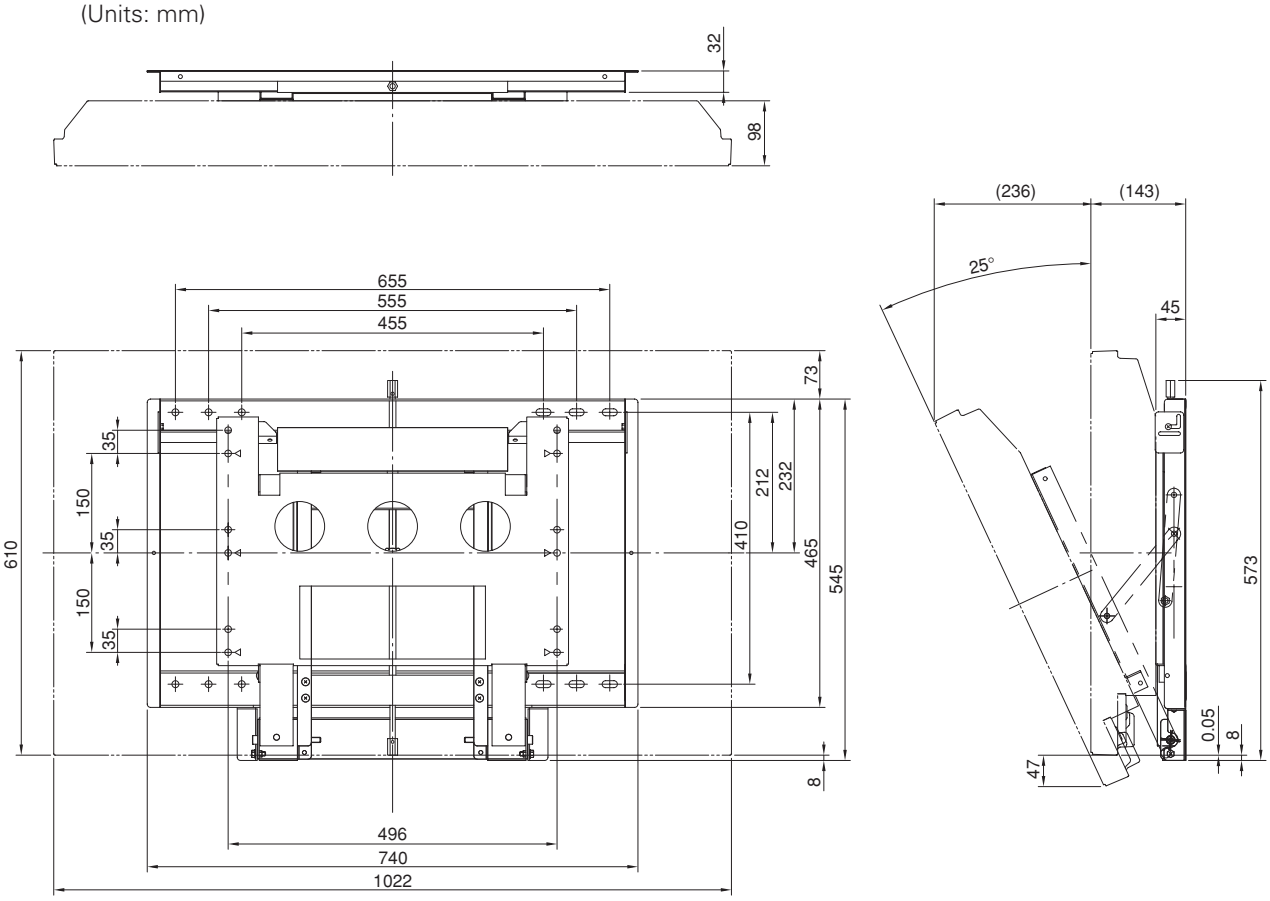
■ When using Plasma Display PDP-507CMX

(Units: mm)



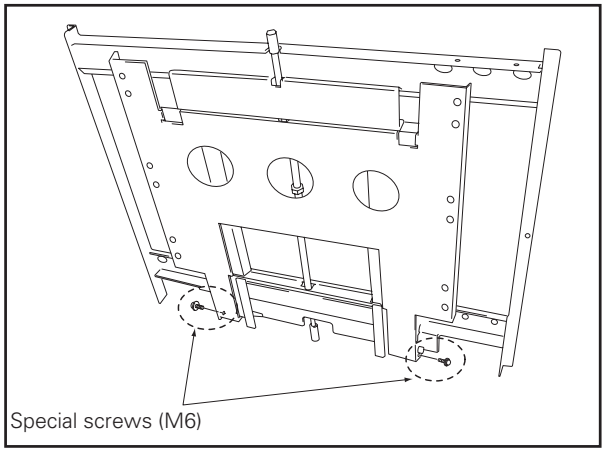
■ When using Plasma Display PDP-427CMX

(Units: mm)

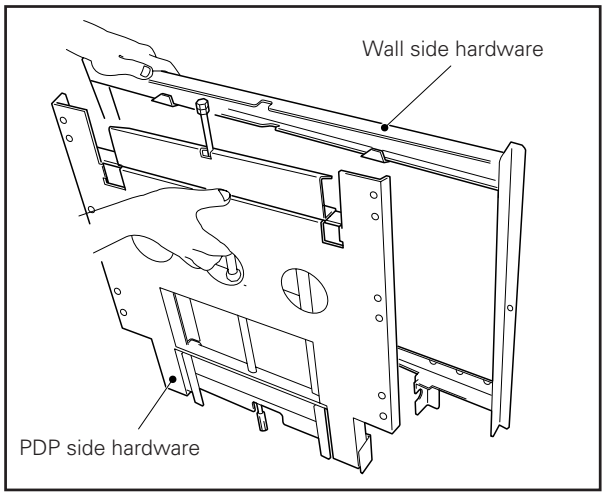


4.6.3 Assembling the mounting hardware and mounting the Plasma Display

① Remove the special screws (two locations) from the bottom of the wall mounting unit.



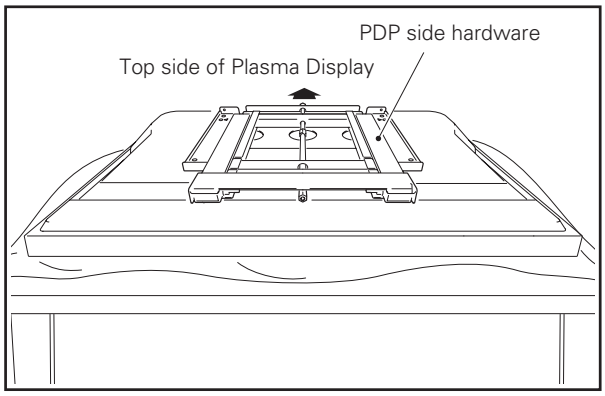
② Remove the hardware on the wall side half and the hardware on the PDP side half.



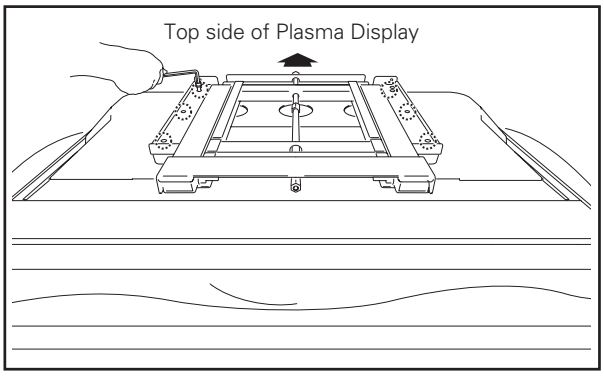
③ Attach the PDP side hardware to the Plasma Display.

Note

- Place a sheet or protective cover to protect the display from scratches or damage.
- Be sure to attach it on top of a flat table or similar surface.



④ Fix the Plasma Display to the PDP side hardware with M8 bolts (six locations).
Use the holes marked with the red triangle "△".



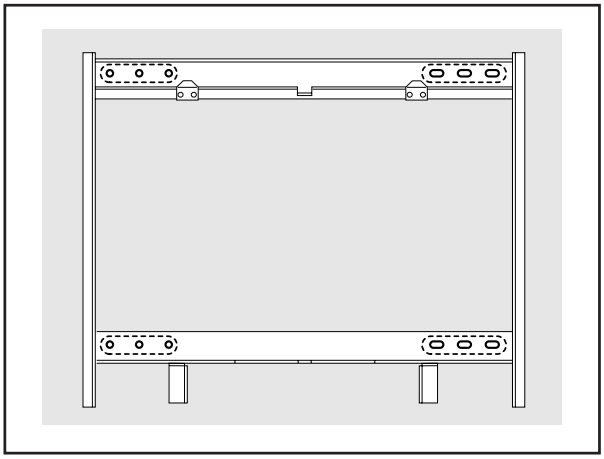
Note

Be sure to install speakers at this stage.
For the installation method, refer to the speaker instruction manual.

⑤ Attach the wall side hardware to the wall.
Install the wall side hardware (four locations) symmetrically on the left and right side (one at each location from the center of the ( ). Wall strength and material determines the type of screws and bolts (sold separately) needed for this installation.

Note

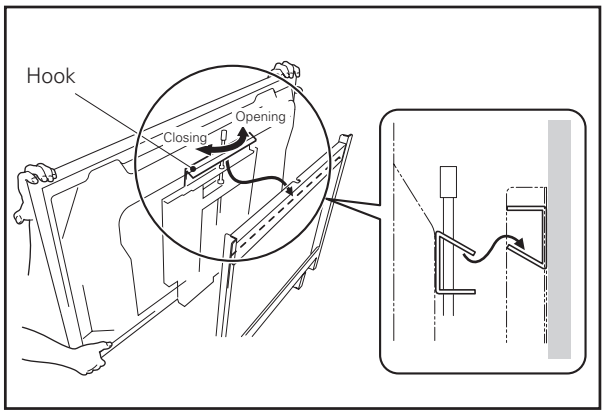
Check the strength of the wall and beams before installing the display.



⑥ Attach the hook on the PDP side hardware to the wall side hardware.

Note

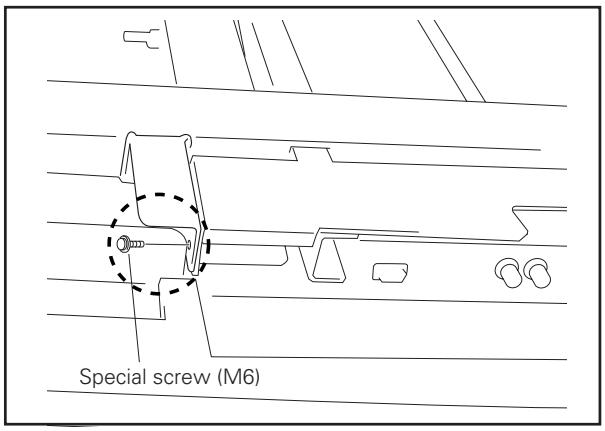
Do not hold the speakers during the installation work.



Caution

- **Always have at least two people do this task.**
- **Verify that the hook has been hung before lifting the Plasma Display into place.**

⑦ Fix the bottom of the hardware with the special screws removed at step 1 (one on the left and one on the right).



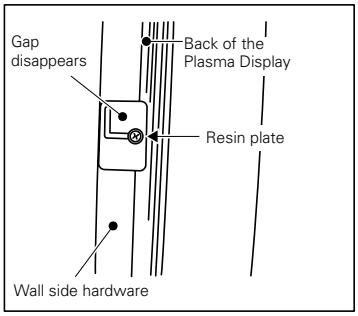
4.6.4 Angle setup

This installation hardware allows the display to be tilted down freely at any angle from the vertical to 25°.
This adjustment must always be done by two people.
Adjust the angle by rotating the screws at the center top and center bottom of the wall side hardware (left or right).

Note

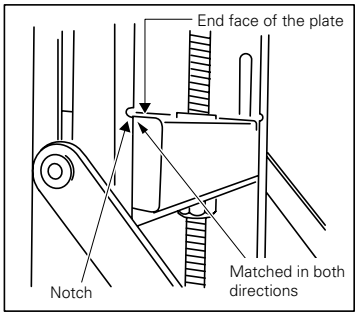
- It is difficult turn the center-bottom screw while increasing the angle. When this happens, adjust the angle by turning the top-center screw.
- Turn the screws very carefully to avoid damaging the wall.
- When a screw becomes tight at either end of the adjustment range, do not turn the adjustment screw any. Doing so applies excessive force, deforming the screw.

Ⓐ Criterion for the vertical location

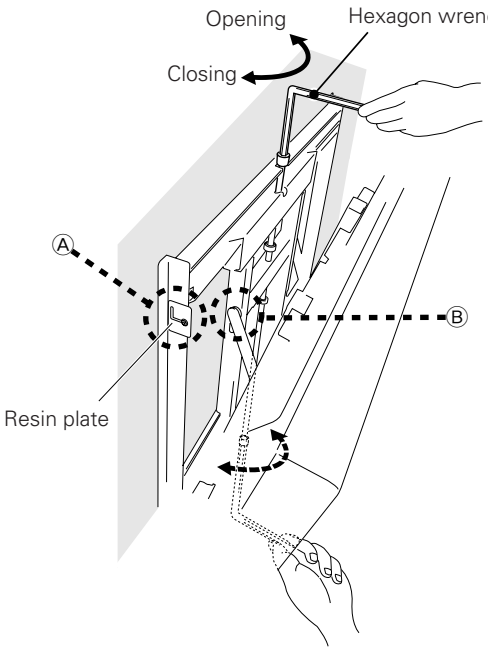


When it is in this state, do not turn the adjustment screw any further in the closing direction.

Ⓑ Criterion when its angle is 25°



When it is in this state, do not turn the adjustment screw any further in the opening direction.



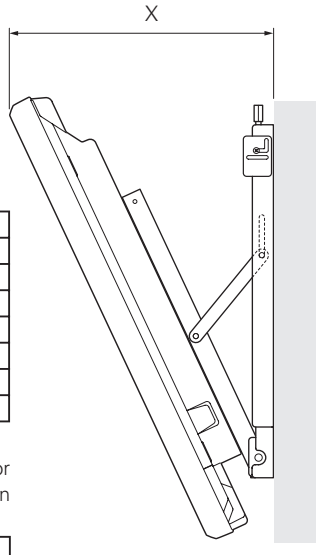
Tilt Angle Criteria

Angle	X		
	Normal holes of PDP-507CMX model	PDP-427CMX model	
		Normal holes	Upper holes
5°	199 mm	191 mm	194 mm
10°	253 mm	240 mm	246 mm
15°	305 mm	287 mm	296 mm
20°	355 mm	333 mm	345 mm
25°	403 mm	376 mm	391 mm

Angle of incline and appearance of the screw for angle adjustment from a horizontal position on the front (PDP-427CMX only)

Standard hole		Upper holes	
16° or more	visible	23° or more	visible

Measuring the opening distance X provides an approximate angle value.

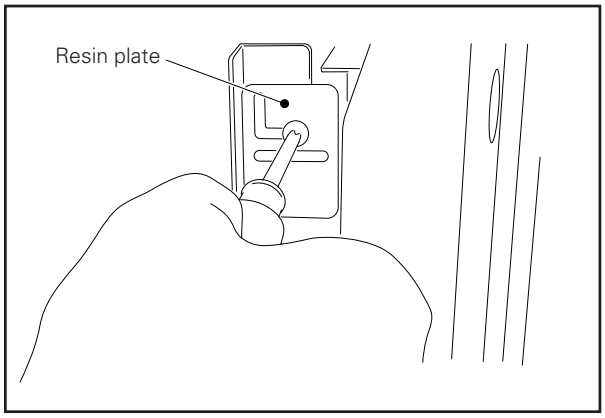


* Illustration depicts PDP-507CMX model.

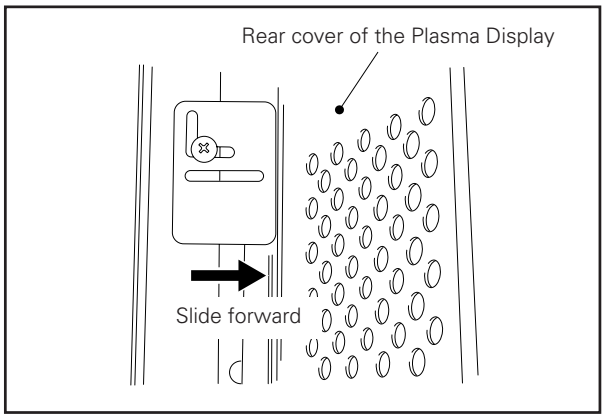
4.6.5 Measure to prevent shakiness when the unit is installed at a slight tilt

With this installation hardware, for structural reasons, the top of the panel may be shaky when installed at a 5° angle from the vertical position.
If this shakiness is a problem, reduce it by following the instructions provided below.

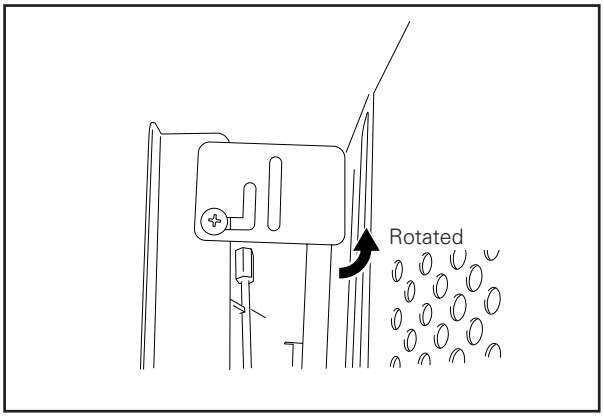
① Use a Philips driver (+) to loosen (left, right) the installation screws on the resin plate used as a guideline when installing it vertically (left, right). Allow the resin plate to move freely.



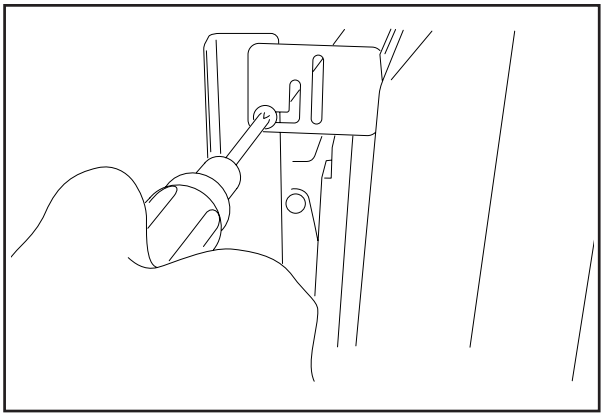
② Slide the resin plate (left, right) forward along the slit to the rear cover of the Plasma Display.



③ If, when it is moved only forward, the distance is too short, rotate the resin plate to use the longer side.



④ After setting the resin plate (left, right) in position, retighten the screws that were loosened at step (1).



You can use above method to reduce the shakiness that occurs when the panel is installed at a slight angle.

4.7 Wall Mount Unit: PDK-WM01

4.7.1 Specifications

External dimensions ..... 1222 mm (W) × 736 mm (H) × 131 mm (D) (48-1/8 in. (W) × 28-31/32 in. (H) × 5-5/32 in. (D))
(mounting hardware and Plasma Display <PDP-507CMX>)
1022 mm (W) × 610 mm (H) × 130 mm (D) (40-1/4 in. (W) × 24-1/32 in. (H) × 5-1/8 in. (D))
(mounting hardware and Plasma Display <PDP-427CMX>)

Weight ..... 9.3 kg (20.5 lbs.) (mounting hardware only)
44.8 kg (98.8 lbs.) (mounting hardware and Plasma Display <PDP-507CMX>)
39.8 kg (87.7 lbs.) (mounting hardware and Plasma Display <PDP-427CMX>)

Materials ..... SPHC, SS400

Finish ..... Semi-matte black paint on rear (Original Pioneer color)

Dimensions of packaging ..... 1070 mm (W) × 100 mm (H) × 500 mm (D)
(42-1/8 in. (W) × 3-15/16 in. (H) × 19-11/16 in. (D))

Package weight ..... 11.5 kg
(25.4 lbs.)

Layers of packing ..... 30 layers

Components

Wall mount unit ..... × 1
Tilt adjustment metal fitting ..... × 1
Bolts M8 ..... × 6
Hexagonal wrench
(Opposite side 6 mm for M8 use) ..... × 1
Stencil ..... × 1

☆ **Operating Temperature Restrictions**
- Ambient temperature: 0 °C to 40 °C

☆ **Operating Temperature Restrictions for Upside-Down Installations**

* Upside-Down Installation is unavailable with the PDK-WM01.

☆ **Operating temperature restrictions for when the speaker system (PDP-S53-LR, PDP-S56-LR) is attached.**
- Ambient temperature: 0 °C to 40 °C

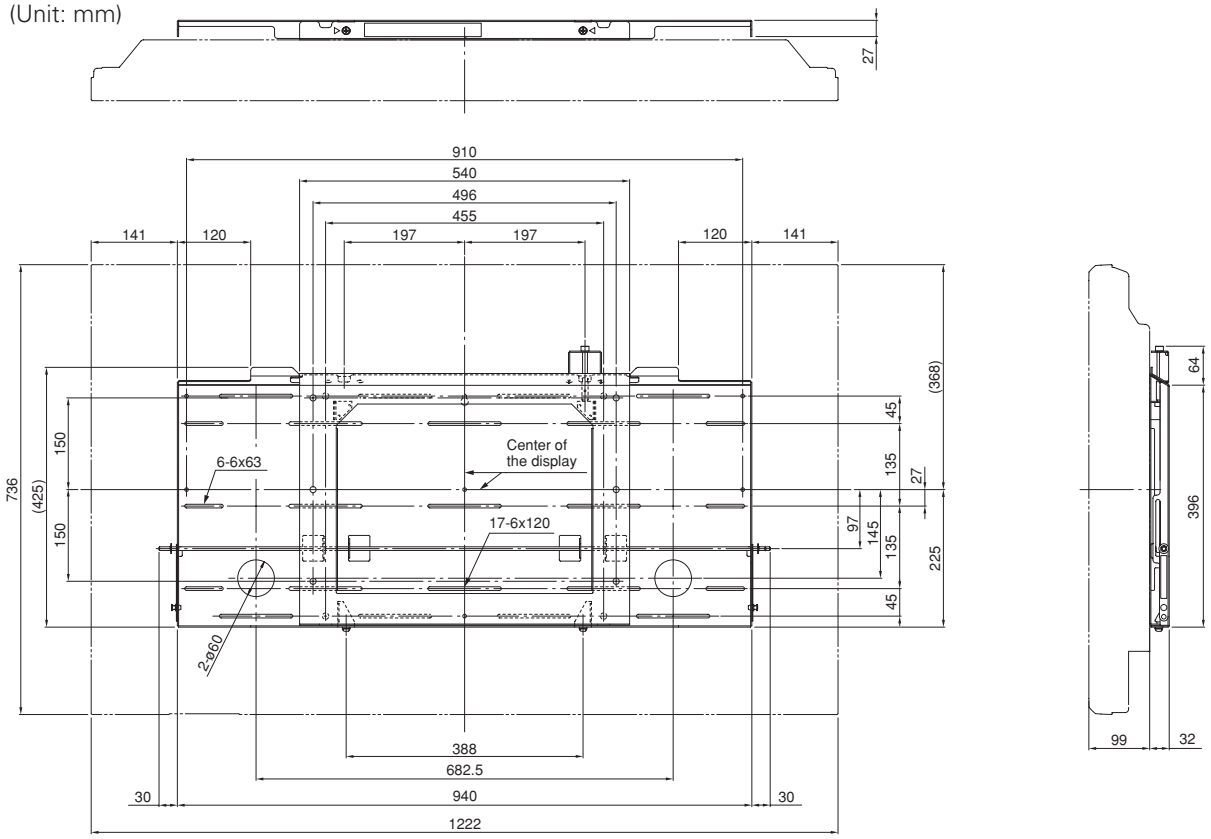
☆ **Attachment Restrictions**
- Install it on perpendicular walls, columns, etc.
  It cannot be installed on an inclined surface.

In wall-mounting installation allow adequate space (a clearance of 300 mm or more) above and below the panel, as well as on the right and the left.

4.7.2 External Dimensions

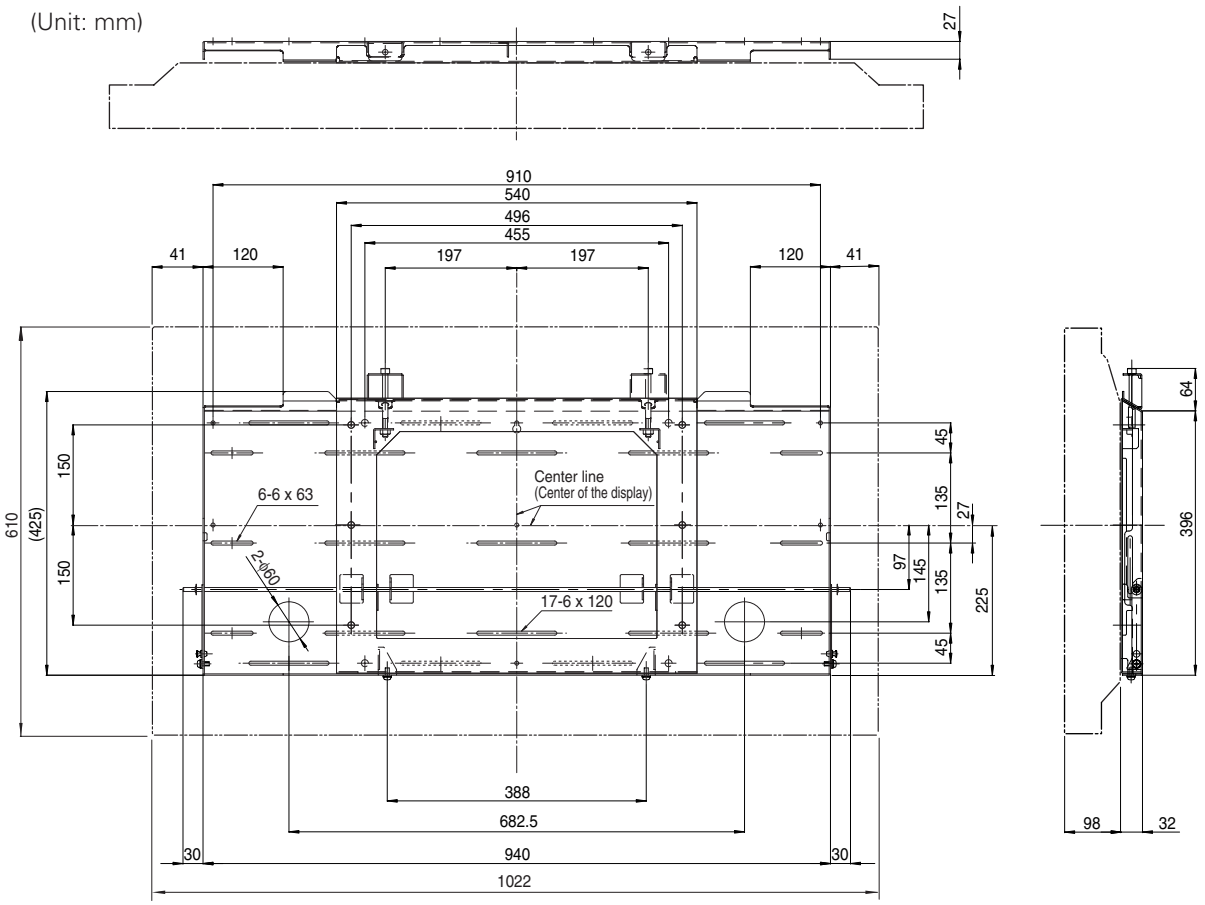
■ When using Plasma Display PDP-507CMX

(Unit: mm)



■ When using Plasma Display PDP-427CMX

(Unit: mm)

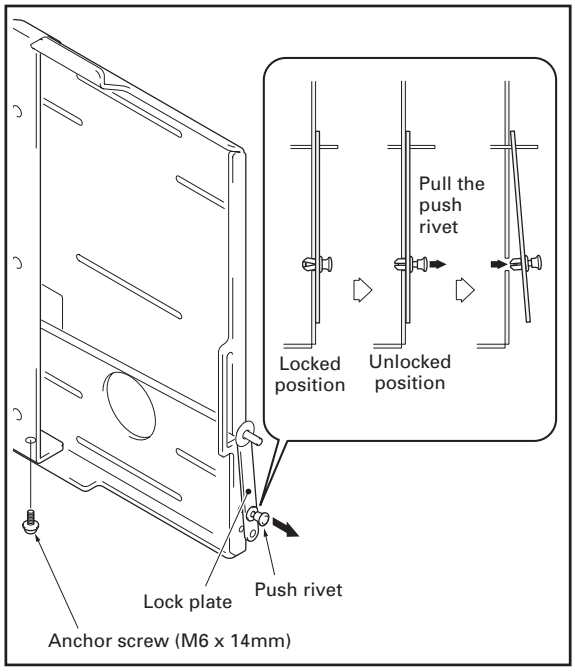


4.7.3 Assembling the mounting hardware and mounting the display

① Remove the push rivet of the lock plate and the bottom anchor screw (M6 x 14 mm (9/16 inch)) (one location: left and right sides)

1 Move the push rivet of the lock plate to its unlocked position (shown in the figure below).

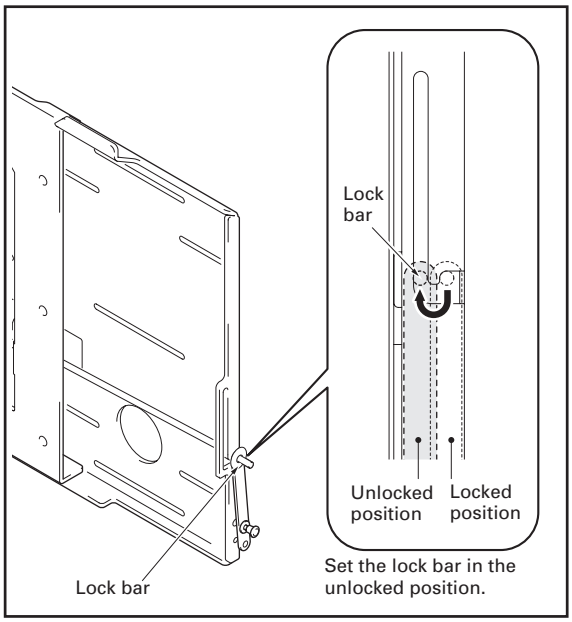
2 Remove the anchor screw from the bottom.



Note

Be careful not to lose the two anchor screws (M6 x 14 mm (9/16 inch)) because they will be used later.

② Release the lock bar (one location: left and right sides)

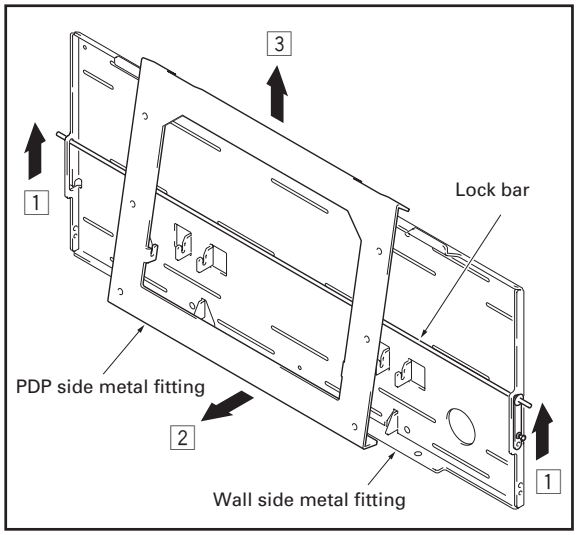


③ Remove the PDP side metal fitting

1 Lift the lock bar to the position where the lock on the PDP side metal fitting is released.

2 While holding the lock bar up, pull out the bottom of the PDP side metal fitting.

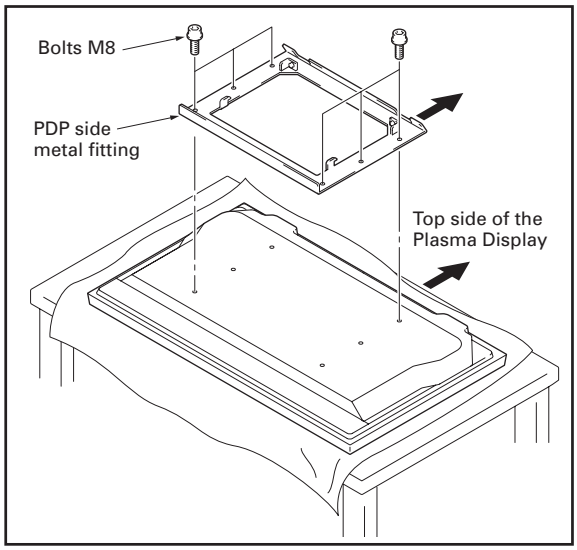
3 Lift then remove the PDP side metal fitting.



④ Attach the PDP side metal fitting to the Plasma Display

1 Spread a sheet or similar material so that the display will not be scratched or damaged.

2 Fix the PDP side metal fitting firmly to the Plasma Display with M8 bolts (six locations).



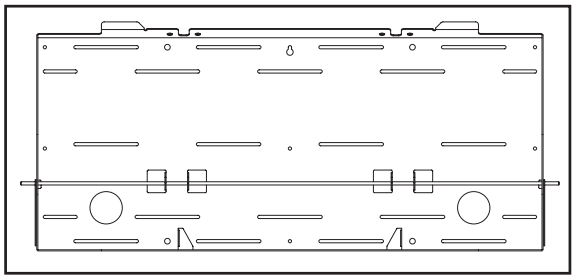
Note

- Always install it on top of a stable table or similar surface.
- If you plan to install speakers and cables, please install them at this stage.
  Do not connect cables for any other device.
- For the speaker installation method, refer to the speaker installation procedure in the Plasma Display operating instructions.

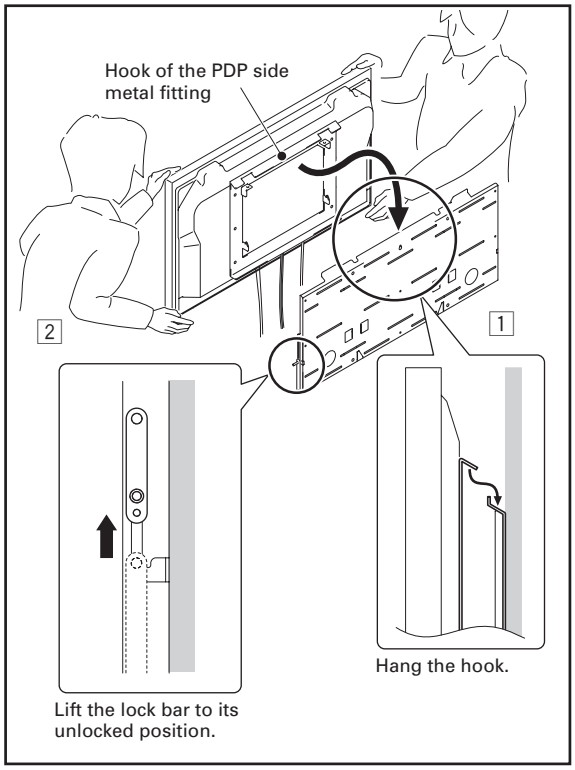
⑤ Install the wall side metal fitting to the wall
Fix it firmly in place symmetrically to the left and right (four or more locations).
Wall strength and material determines the type of screws and bolts (sold separately) needed for this installation.

Note

Chack the strength of the wall, columns, etc. before beginning the installation.



⑥ Hang the hook of the PDP side metal fitting on the wall side metal fitting
1 Hang the hook on the ceiling surface part of the PDP side metal fitting on the wall side metal fitting.
2 Raise the lock bar to attach the Plasma Display. Make sure that the lock bar is fully lowered.



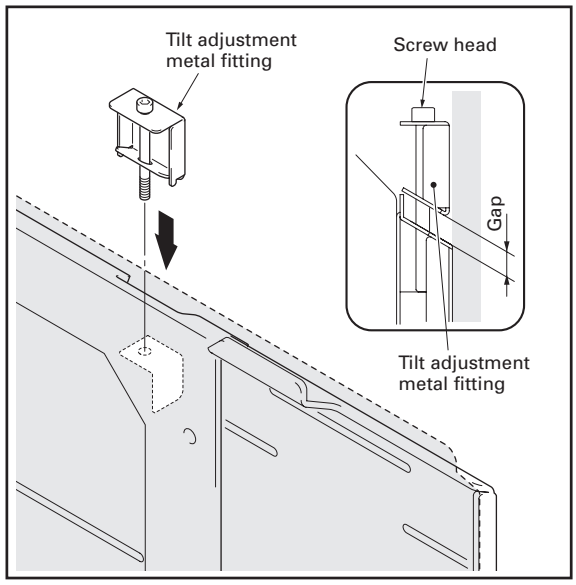
Caution
- **Always have at least two people do this task.**
- **Check that the hook has been hung before lifting the Plasma Display.**

Note

- If speakers are attached, do not hold the speakers to perform this attachment.
- Be careful that the wiring etc. is not caught in the metal fitting or on the Plasma Display. When a speaker is attached, the wiring is easily caught between the wall and the speaker.

⑦ Fine adjustment of the left-right tilt of the Plasma Display.

If the Plasma Display is slightly tilted to the left or right after it is installed on the wall, adjust this tilt by attaching the adjustment metal fitting (at lone location on the right and on the left).
Insert the tilt adjustment metal fitting in the notch on the top surface of the PDP side metal fitting that is tilted downward. Attach it by rotating the screw.
1 Rotate the screw until the gap between the wall side metal fitting and the tilt adjustment metal fitting disappears. When the gap between the wall side metal fitting and the tilt adjustment metal fitting has disappeared, the screw becomes difficult to rotate and begins to lift up the Plasma Display.
2 Rotate the screw to adjust the tilt.

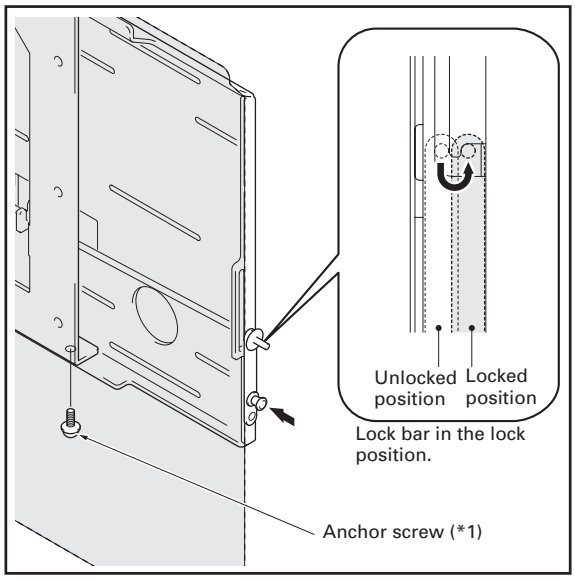


Note

The range that the tilt can be adjusted by the screw is about 5 mm (3/16 inch). The screw rotates about three times. Be careful not to over-rotate the screw. If the screw is turned too much, the metal fitting may be damaged.

⑧ With the lock bar in the lock position, fix the lock plate firmly in place with push rivet and the anchor screw (M6 x 14 mm (9/16 inch)) (one location: left and right sides) removed in step 1 (one location: left and right sides).

- **If there are speakers installed on both sides**
  Fix in place with the anchor screw (M6 x 14 mm (9/16 inch)) removed in step 1 (*1).



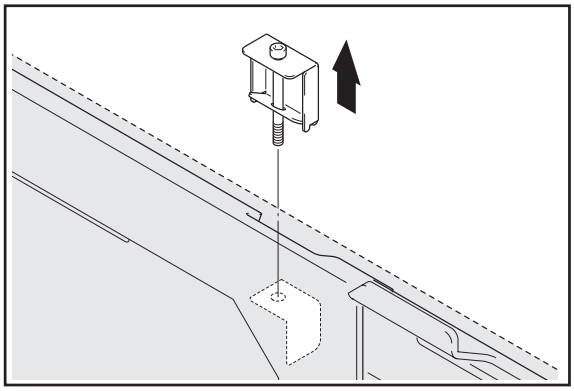
4.7.4 When removing the Plasma Display

Caution **Before beginning this procedure, turn off the power to the Plasma Display and peripheral devices. Remove the power plugs from the outlets. Also remove connecting cables if necessary.**

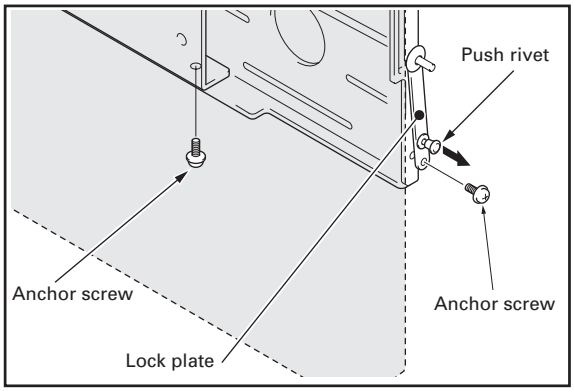
① Loosening the screw on the tilt adjustment metal fitting.

Note

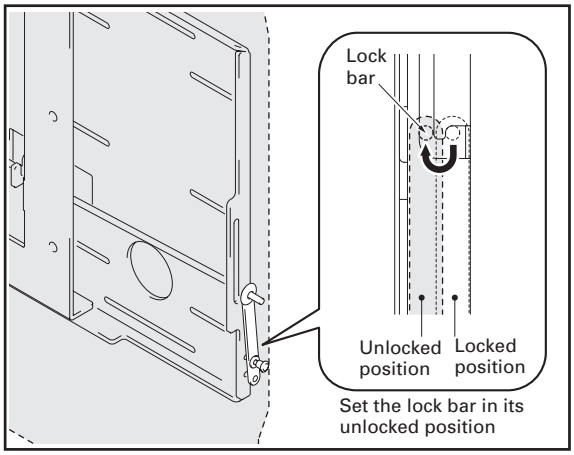
Removing the Plasma Display without removing the tilt adjustment metal fitting (may scratch the wall).



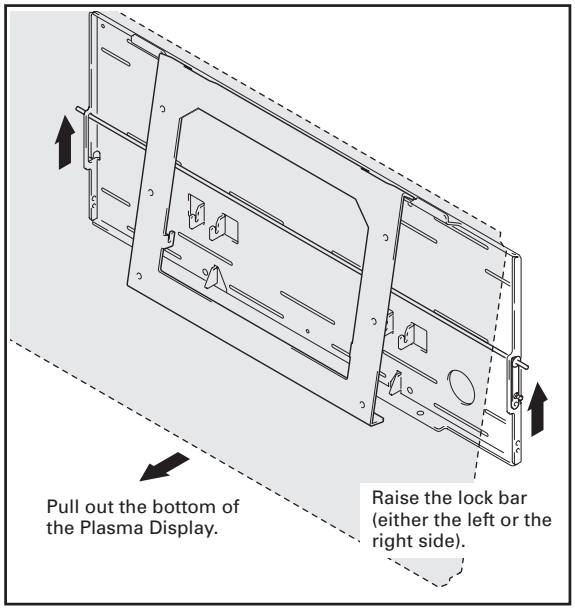
② Remove the push rivet and anchor screws that are holding the lock plate. Then, remove the anchor screws that are holding the PDP metal fitting (two locations on the left and right).



③ Unlock the lock bar (two locations on the left and right).

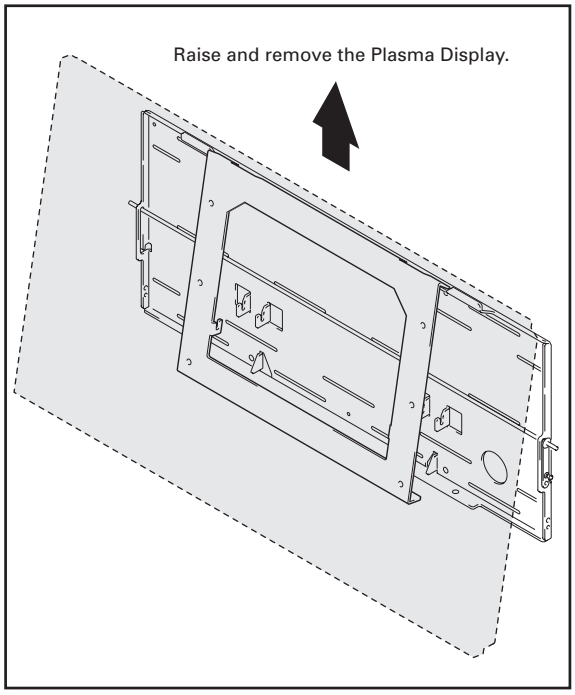


④ Raise the lock bar then pull the bottom of the Plasma Display forward.



Caution **Pull out the bottom of the Plasma Display very carefully so that the hook on the PDP side metal fitting is not displaced.**

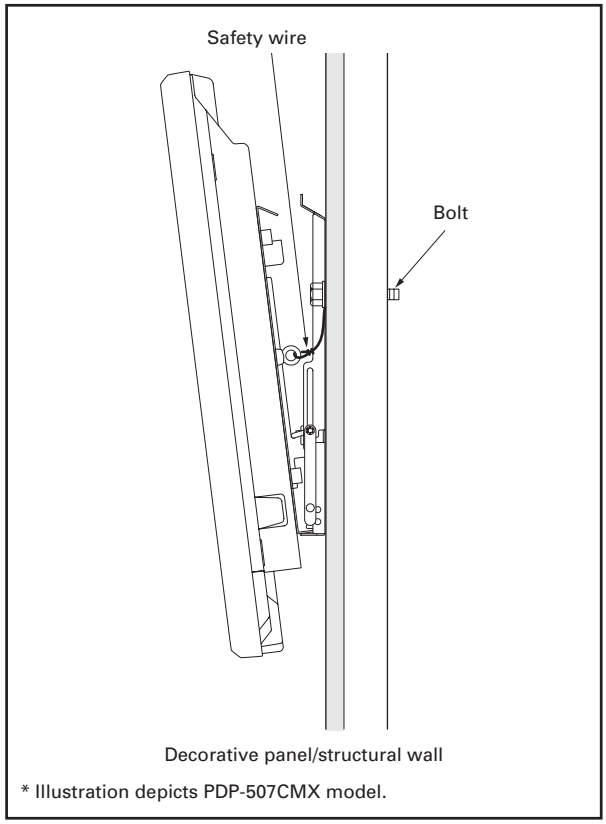
⑤ Raise to remove the Plasma Display.



Caution **Always have at least two people manage this task.**

(Precautions when installing the hardware)

Firmly attach the safety wire to the attachment hole on the Plasma Display. Anchor it firmly to the wall with a bolt that extends through the structural wall.



* Illustration depicts PDP-507CMX model.

4.8 Ceiling Mount Unit: PDK-5012

4.8.1 Specifications

External dimensions ..... 1222 mm (W) × 1168 mm (H) × 300 mm (D)
(48-1/8 in. (W) × 45-31/32 in. (H) × 11-13/16 in. (D))
(mounting hardware and Plasma Display <PDP-507CMX>)
1022 mm (W) × 1062 mm (H) × 300 mm (D)
(40-1/4 in. (W) × 41-13/16 in. (H) × 11-13/16 in. (D))
(mounting hardware and Plasma Display <PDP-427CMX>)
Weight ..... 14.5 kg (32.0 lbs.) (mounting hardware only)
50.0 kg (110.2 lbs.) (mounting hardware and Plasma Display <PDP-507CMX>)
45.0 kg (99.2 lbs.) (mounting hardware and Plasma Display <PDP-427CMX>)
Adjustable range of angles ..... Horizontal to 25 degrees below horizontal, 45 degrees left/right
Material ..... Steel pipe for general structure (STKM-R), STK, SPHC
Finish ..... Semi-matte black paint (Original Pioneer color)
Package dimensions ..... 1035 mm (W) × 360 mm (H) × 540 mm (D)
(40-3/4 in. (W) × 14-3/16 in. (H) × 21-1/4 in. (D))
Package weight ..... 21.5 kg (47.4 lbs.)
Layers of packing ..... 10 layers

Components

PDP bracket ..... × 1
Bolts M8 ..... × 6
Special screws ..... × 4
Hole cover ..... × 1
Stencil (printed on the wrapping material that is inside) ..... × 1
Installer's contact information (Japan only) ..... × 1
Operating instructions ..... × 1

The appropriate types of screws and other mounting hardware will depend on the strength and composition of the ceiling. Purchase them separately.

☆ **Operating Temperature Restrictions**
- Ambient Temperature: 0 °C to 40 °C

☆ **Operating Temperature Restrictions for Upside-Down Installations** **(*1, *2)**
- Ambient temperature: 0 °C to 40 °C
- Other factors: Maintain sufficient clearance between the display and the wall (at least 300 mm)

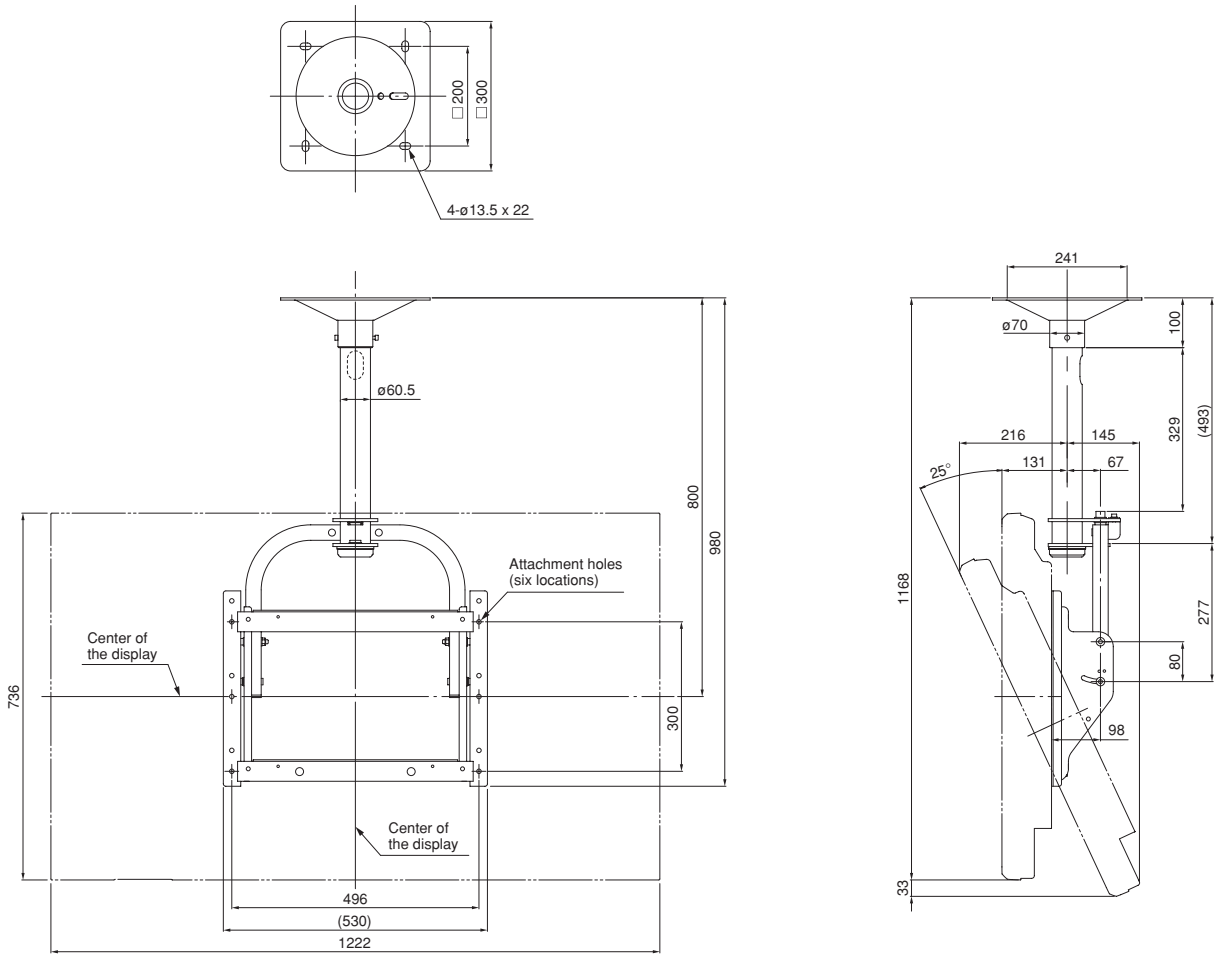
☆ **Operating temperature restrictions for when the speaker system (PDP-S53-LR, PDP-S56-LR) is attached.**
- Ambient temperature: 0 °C to 40 °C

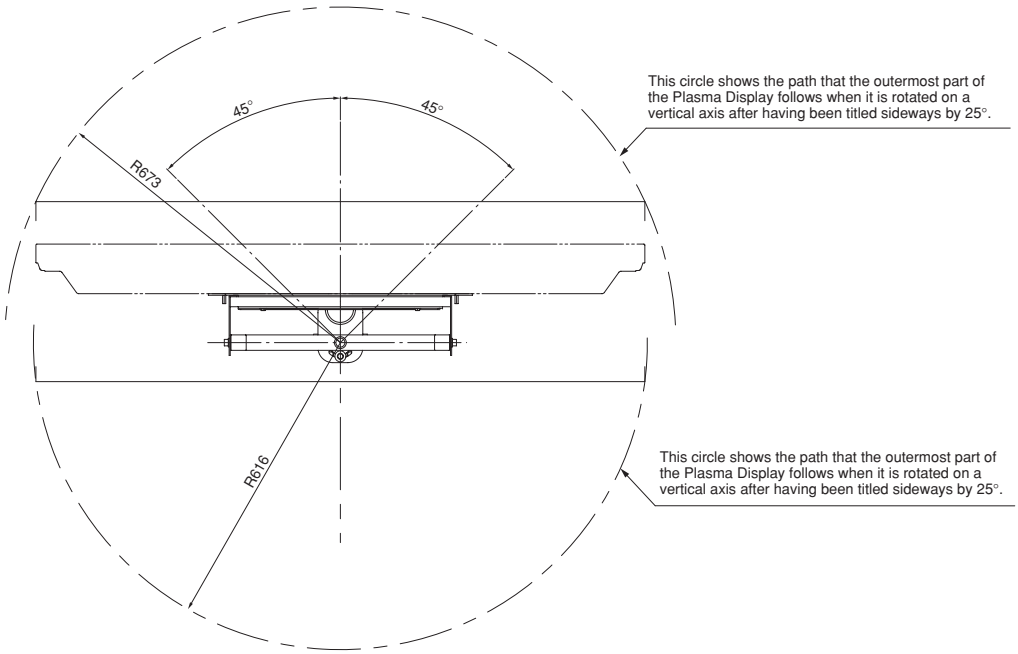
*1 For this installation, set the 'FAN CONTROL' to 'MAX' as shown in "5.4.3 Adjustment and Setting in the Integrator Mode 14) Cooling Fan Control Setting" (pg. 235).
*2 When INPUT2 has been selected, use input compatible signal up to 1280x1024 (60 Hz) at ambient temperature condition of 0 °C to 35 °C.

4.8.2 External Dimensions

■ When using Plasma Display PDP-507CMX

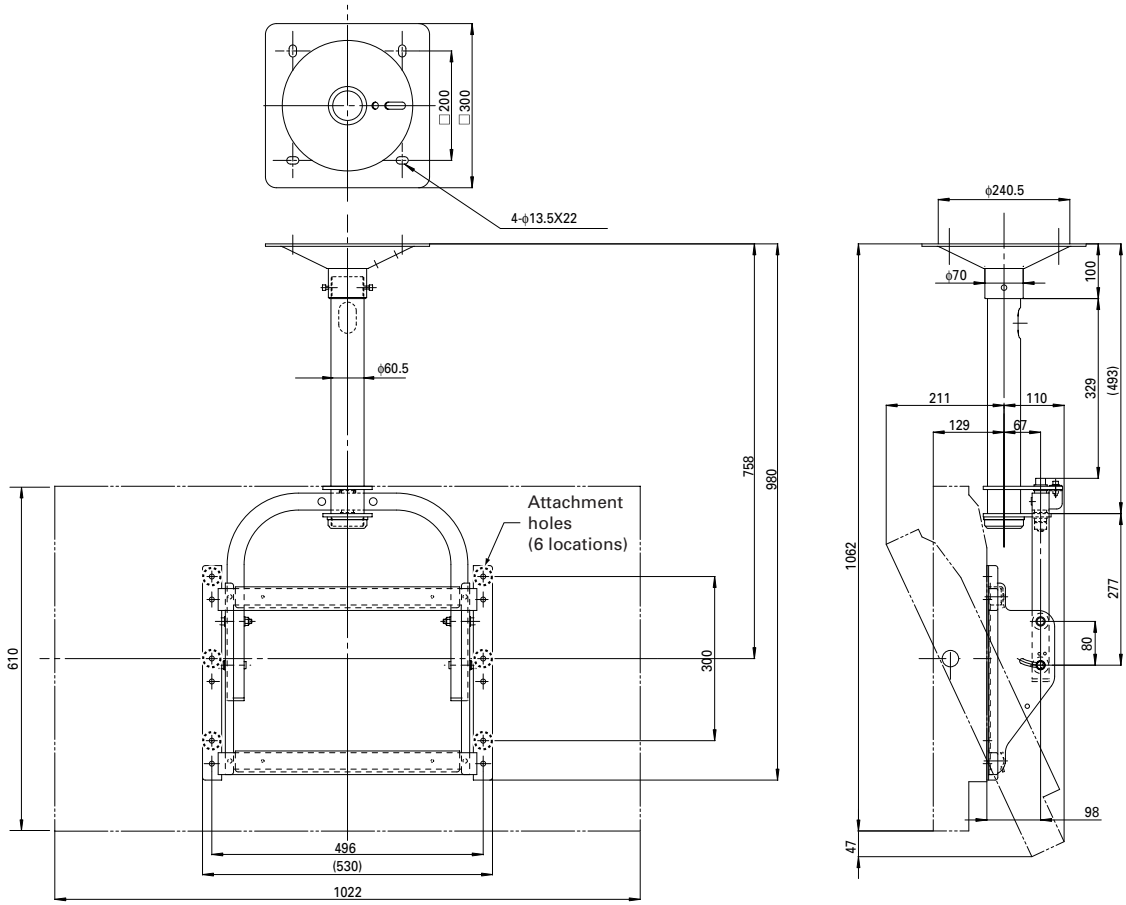
(Unit: mm)

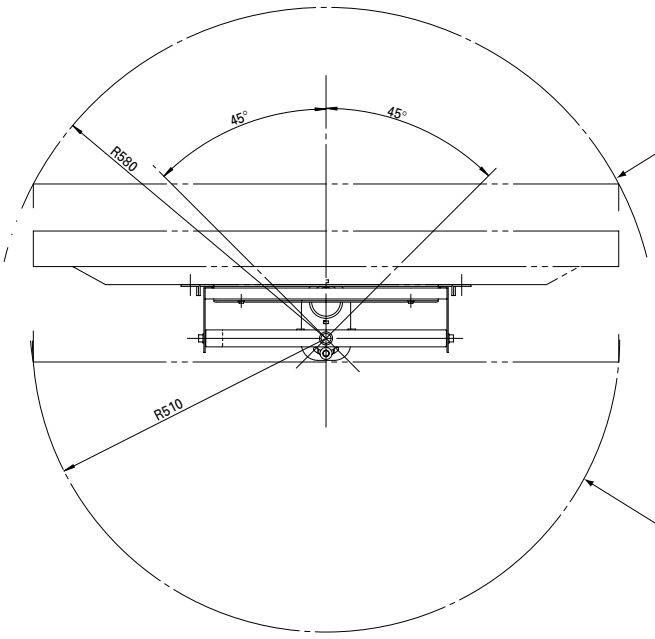



45°
45°
R673
R616
This circle shows the path that the outermost part of
the Plasma Display follows when it is rotated on a
vertical axis after having been titled sideways by 25°.
This circle shows the path that the outermost part of
the Plasma Display follows when it is rotated on a
vertical axis after having been titled sideways by 25°.

■ When using Plasma Display PDP-427CMX

(Unit: mm)





This circle shows the path that the outermost part of the Plasma Display follows when it is rotated on a vertical axis after having been titled sideways by 25°.

This circle shows the path that the outermost part of the Plasma Display follows when it is rotated on a vertical axis after having been titled sideways by 25°.

4.8.3 Installing the mounting hardware

1) Preparations

You will need the following tools. Make sure you have them at hand before beginning work.

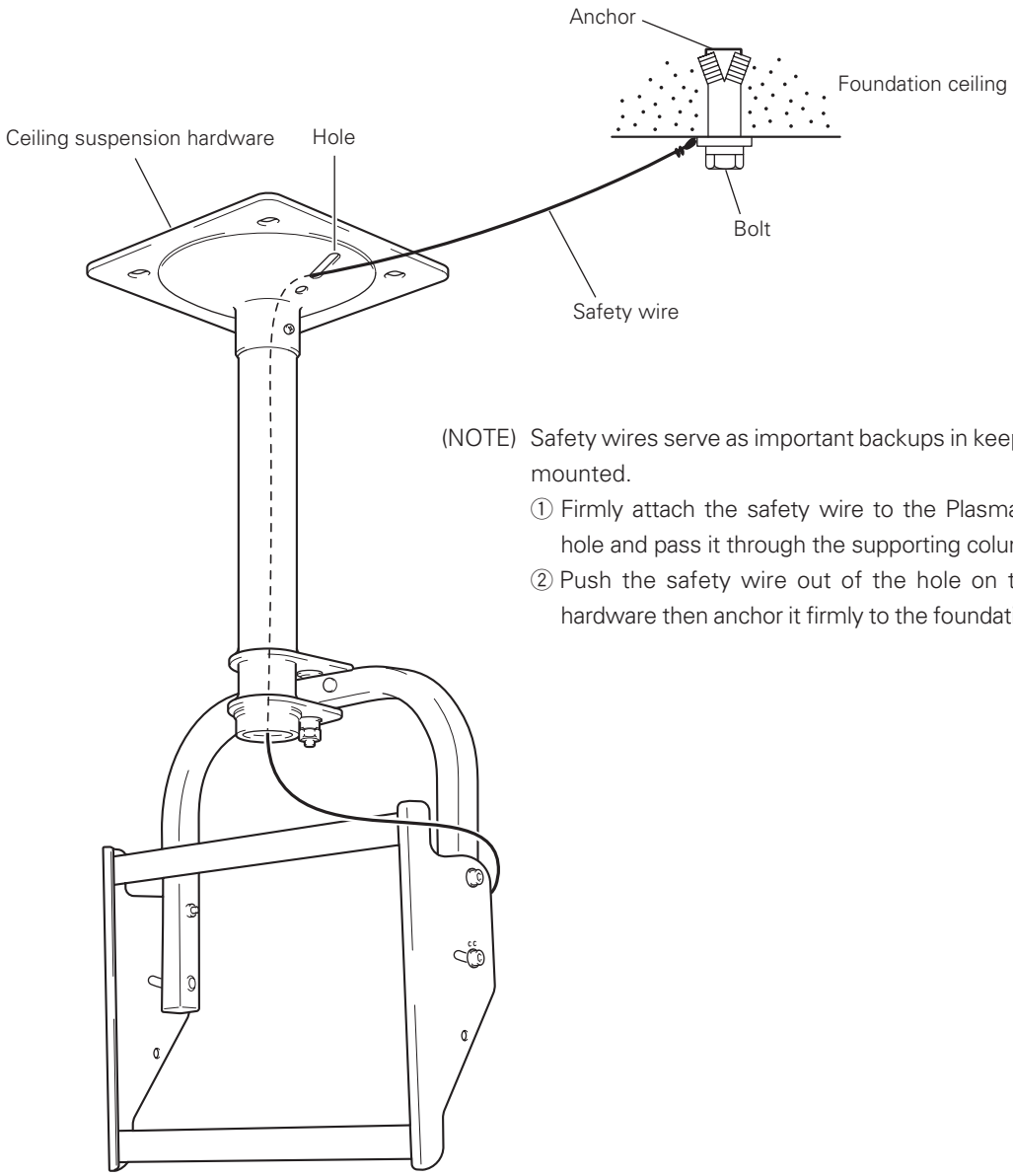
- Phillips Head Screwdriver
- Hexagonal wrench (subtense 5 mm, for M6 bolts)
- Hexagonal wrench (subtense 6 mm, for M8 bolts)

You'll also need tools for ceiling work.

2) Install the mounting hardware

Select the installation site. Apply the supplied pattern to the ceiling, drill the holes, then mount the ceiling suspension hardware. The appropriate types of screws and other display/mounting hardware depends upon the strength and composition of the particular ceiling.

- Firmly tight all bolts.
- After attaching the mounting hardware but before mounting the Plasma Display, confirm the strength of the mount portion of the ceiling.
- For additional safety, use the holes in the ceiling suspension hardware as shown.
  [Use parts strong enough to support the weight of the display]



(NOTE) Safety wires serve as important backups in keeping the unit securely mounted.

① Firmly attach the safety wire to the Plasma Display attachment hole and pass it through the supporting column.

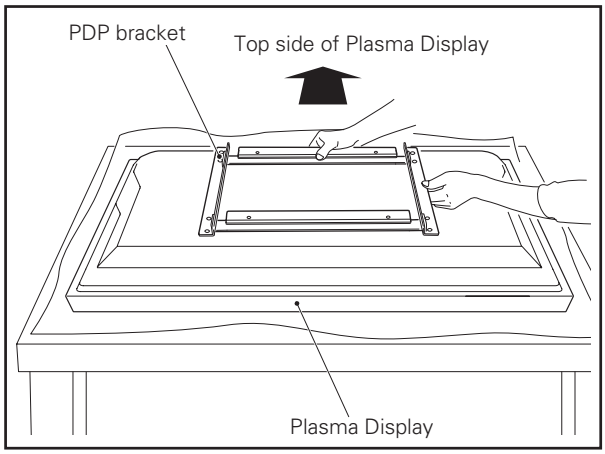
② Push the safety wire out of the hole on the ceiling mounting hardware then anchor it firmly to the foundation ceiling with a bolt.

4.8.4 Attach the Plasma Display

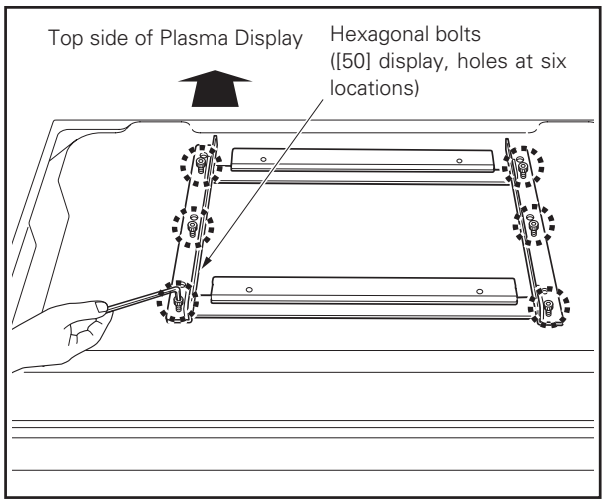
① Attach the PDP bracket to the Plasma Display.

Note

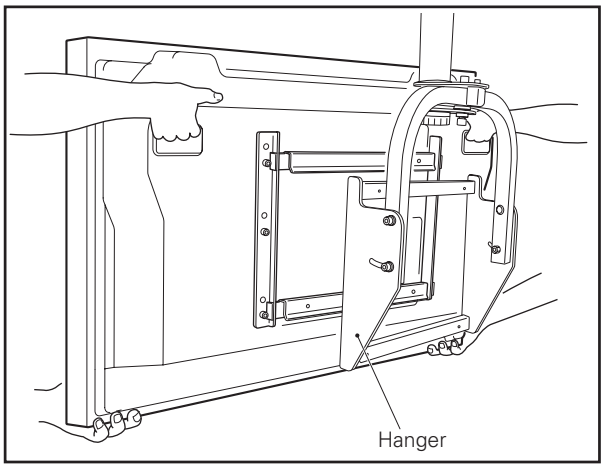
- Place a sheet or protective cover to protect the display from scratches or damage.
- Be sure to work on top of a flat table or similar surface.
- Be careful that the PDP bracket is not upside down.



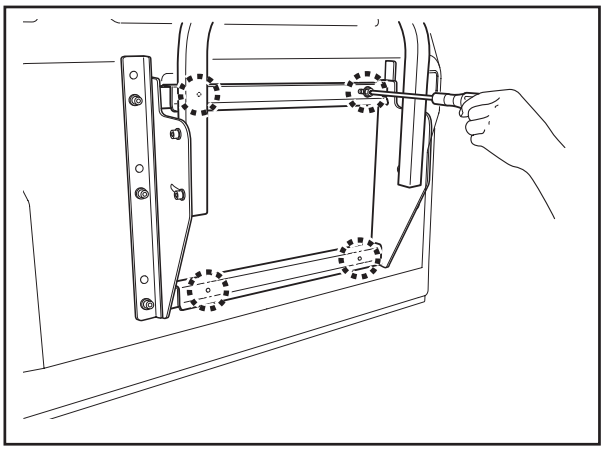
② Fix the Plasma Display to the PDP bracket with screws (six locations).



③ Attach the Plasma Display to the hanger.



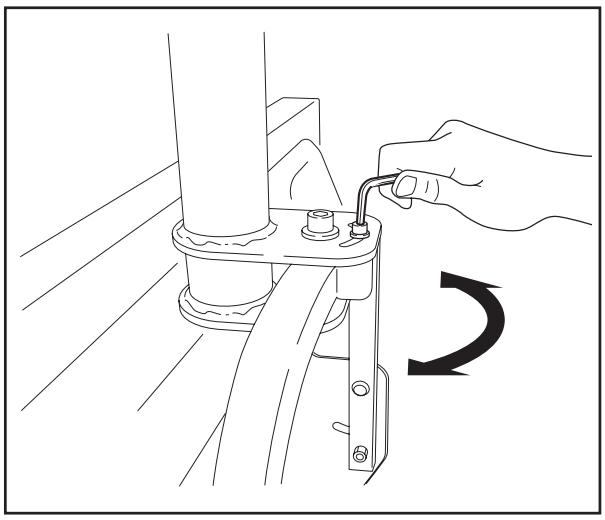
④ Screw the Plasma Display to the hanger (at four locations).



4.8.5 Angle setup

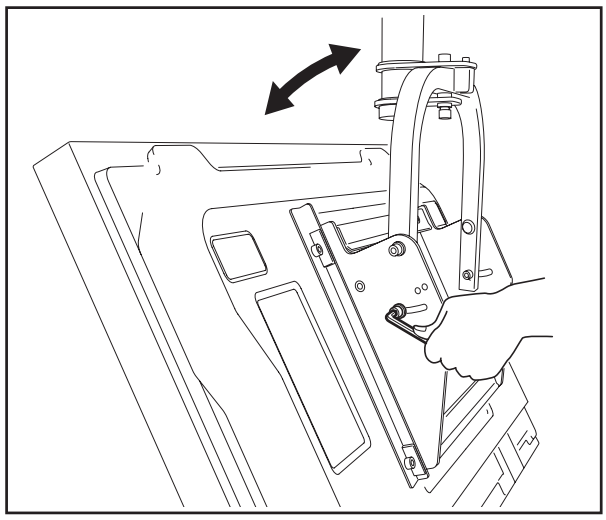
Left-right Adjustment

You can adjust it 45° to the left or right by loosening the top screw.
Set the desired angle then tighten the screw.



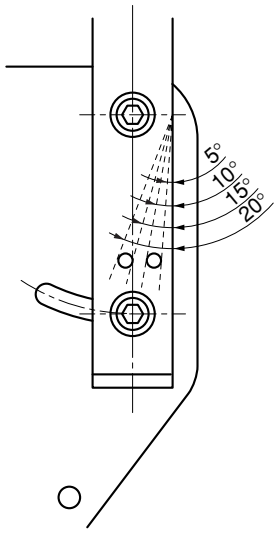
Vertical Adjustment

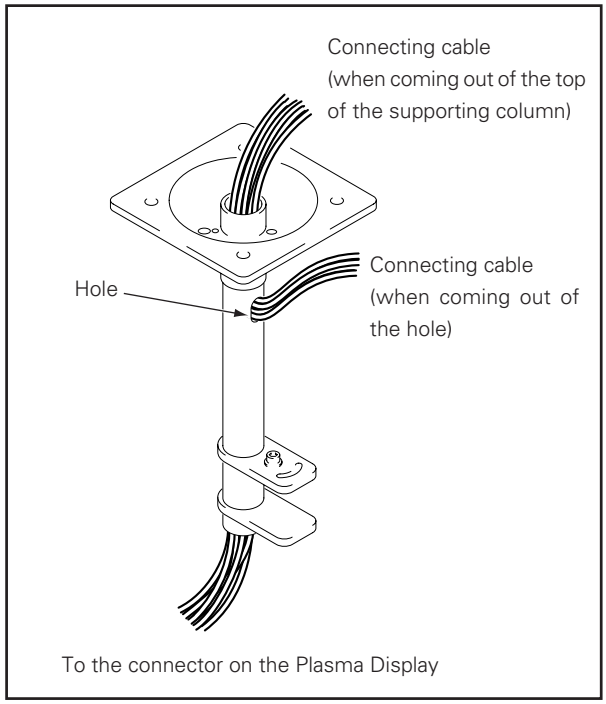
You can adjust its vertical angle by loosening the screws on the left and right sides (maximum adjustment of 25° downwards from the vertical position).



Set it to the desired angle while supporting the Plasma Display. Retighten the loosened screws on the left and right sides. The hole on the side indicates the angle (5° units).

Detailed Angle Standard Diagram





4.9 Mobile Cart: PDK-5014

4.9.1 Specifications

External dimensions ..... [1] 1222 mm (W) × 1718 mm (H) × 710 mm (D)
(48-1/8 in. (W) × 67-5/8 in. (H) × 27-15/16 in. (D))
(when using the Plasma Display <PDP-507CMX>)
[1] 1022 mm (W) × 1655 mm (H) × 710 mm (D)
(40-1/4 in. (W) × 65-5/32 in. (H) × 27-15/16 in. (D))
(when using the Plasma Display <PDP-427CMX>)
[2] 1222 mm (W) × 1718 mm (H) × 730 mm (D)
(48-1/8 in. (W) × 67-5/8 in. (H) × 28-3/4 in. (D))
(when using the Plasma Display <PDP-507CMX>)
[2] 1022 mm (W) × 1655 mm (H) × 730 mm (D)
(40-1/4 in. (W) × 65-5/32 in. (H) × 28-3/4 in. (D))
(when using the Plasma Display <PDP-427CMX>)
Note) [1] : External dimensions of Serial No. 1 to 510 of PDK-5014
[2] : External dimensions of Serial No. 511 and higher of PDK-5014

Weight ..... 43.0 kg (94.8 lbs.) (stand only)
78.5 kg (173.1 lbs.) (stand and Plasma Display <PDP-507CMX>)
73.5 kg (162 lbs.) (stand and Plasma Display <PDP-427CMX>)

Materials ..... STKM (steel pipe) SPCC and SS41

Finish ..... Melamine baking finish (silver metallic)

Dimensions of packaging ..... 1465 mm (W) × 200 mm (H) × 790 mm (D)
(57-11/16 in. (W) × 7-7/8 in. (H) × 31-3/32 in. (D))
(bracket, display stand section)
810 mm (W) × 295 mm (H) × 810 mm (D)
(31-7/8 in. (W) × 11-5/8 in. (H) × 31-7/8 in. (D))
(stand shelf, leg section)

Package weight ..... 38 kg (83.8 lbs.) (bracket, display stand section)
21 kg (46.3 lbs.) (stand shelf, leg section)

Layers of packing ..... 10 layers

Components

Display stand ..... × 1
Rear cover ..... × 1
Leg base ..... × 1
Bracket ..... × 1
Stand shelf ..... × 1
Hexagonal bored bolts (M8 × 20 mm) ..... × 10
Hexagonal bored bolts (M8 × 60 mm) ..... × 4
Hexagonal wrench ..... × 1
Washers ..... × 4
Plate spring washers ..... × 4

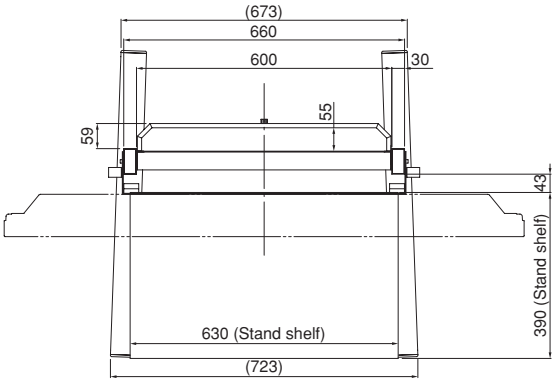
☆ **Operating Temperature Restrictions**
- Ambient Temperature: 0 °C to 40 °C

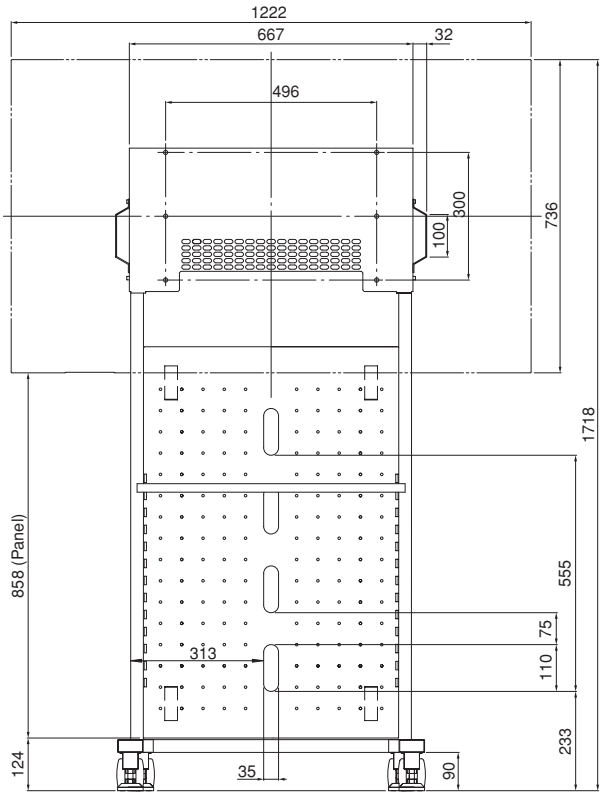
☆ **Operating temperature restrictions for when the speaker system (PDP-S53-LR, PDP-S56-LR) is attached.**
- Ambient temperature: 0 °C to 40 °C

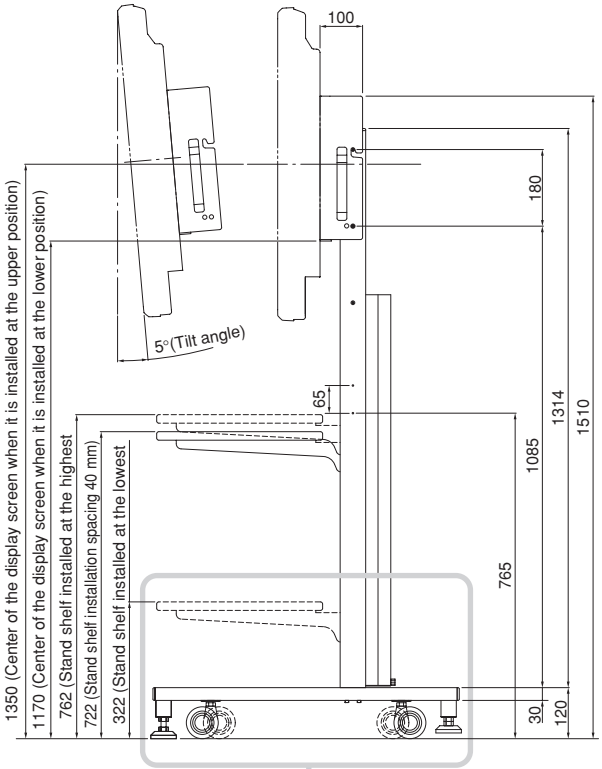
4.9.2 External Dimensions

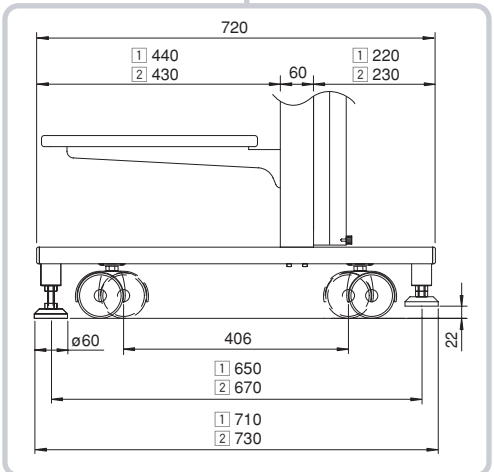
■ When using Plasma Display PDP-507CMX

(Units: mm)






100
180
5°(Tilt angle)
1350 (Center of the display screen when it is installed at the upper position)
1170 (Center of the display screen when it is installed at the lower position)
762 (Stand shelf installed at the highest
722 (Stand shelf installation spacing 40 mm)
322 (Stand shelf installed at the lowest
65
1085
1314
1510
765
30
120



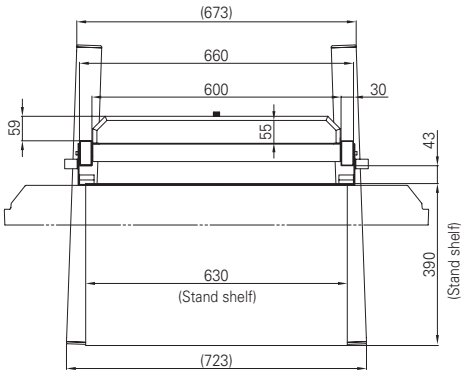
Note: Dimensions

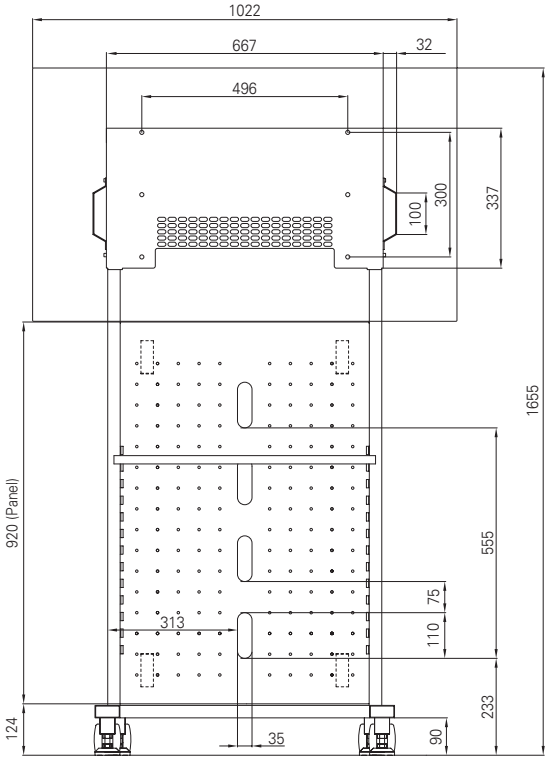
1 : Compatible with Serial Nos. 1 to 510 of PDK-5014

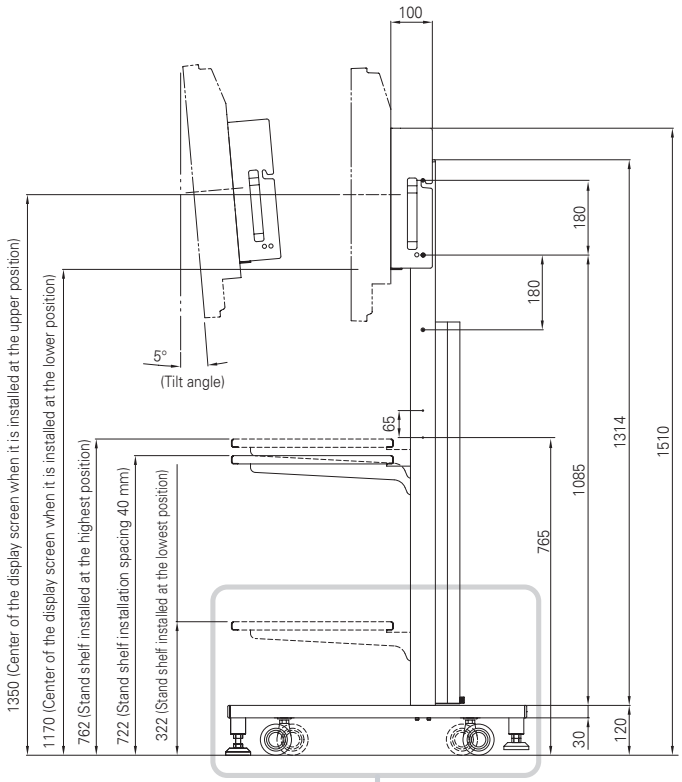
2 : Compatible with Serial No. 511 and higher of PDK-5014

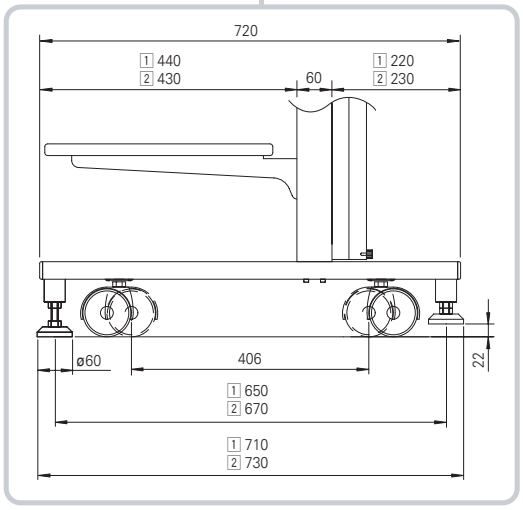
■ When using Plasma Display PDP-427CMX

(Units: mm)









Note: Dimensions

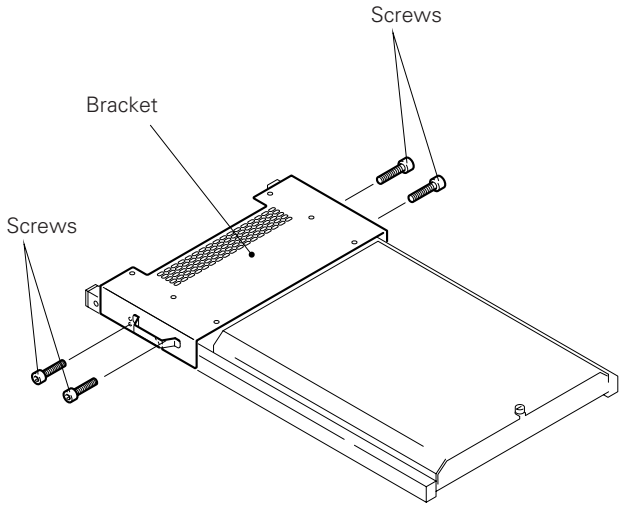
1 : Compatible with Serial Nos. 1 to 510 of PDK-5014

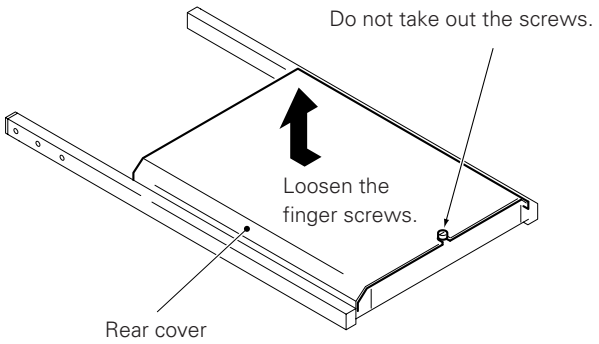
2 : Compatible with Serial No. 511 and higher of PDK-5014

4.9.3 Disassembling the display stand

① Remove the screws (four locations on the left and right sides) then take off the bracket. For packing reasons, the bracket is mounted at a different location then the final installation location.

② Remove the rear cover.





4.9.4 How to install

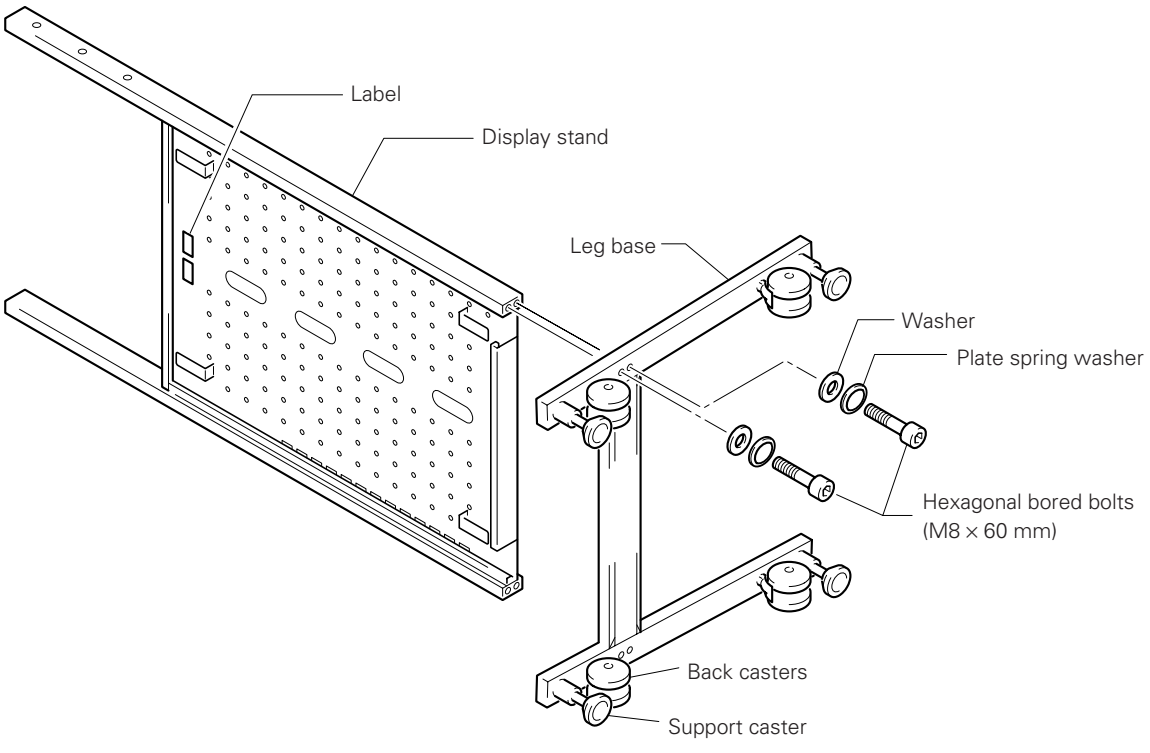
In order to ensure safety during installation, always be sure to work with more than two people.

① Assemble the unit

Attach the leg base to the display stand using the hexagonal bored bolts (M8 × 60 mm) so that the rear label faces towards the back casters (shown in the figure below).

Note

For safety, alternately tighten each bolt two times or more until they are firmly fixed in place.

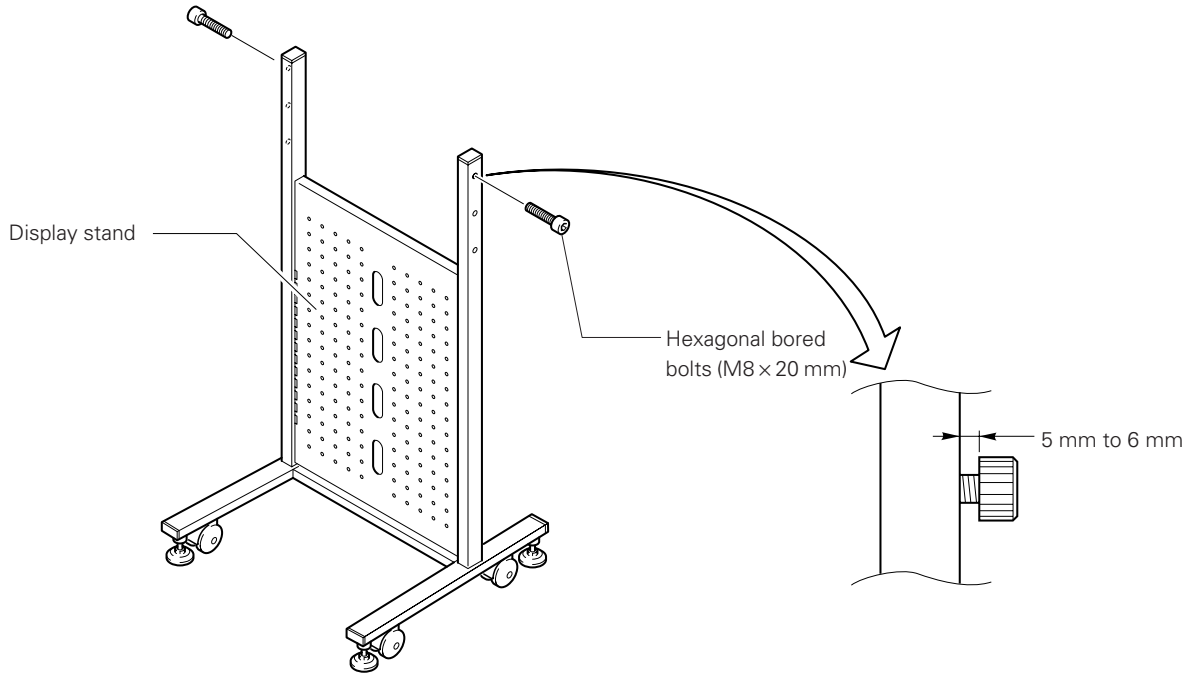


② Attach bracket bolts to display stand

Attach the hexagonal bored bolts (M8 × 20 mm) to the display stand, being sure to leave a space of 5 to 6 millimeters when doing so. These bolts may be attached at two different levels to allow a distance of 1350 mm or 1170 mm from the floor to the center of the display panel.

Note

Do not place bracket bolts in the third set of screw holes from the top. These screw holes are used in Step 4 below.

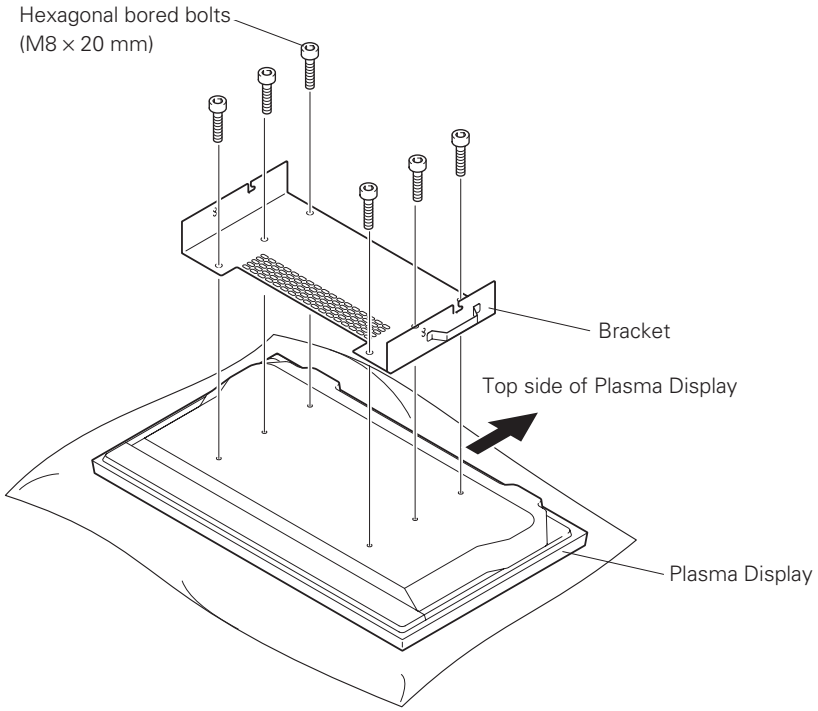


③ Attach bracket to Plasma Display

Using the hexagonal bored bolts (M8 × 20 mm), attach the bracket to the rear of the Plasma Display by screwing the bolts into the screw holes as the figure.

Note

- The Plasma Display should be placed on a blanket or other soft surface to avoid scratching or otherwise damaging the surface of the display.
- For safety, alternately tighten each bolt two times or more until they are firmly fixed in place.

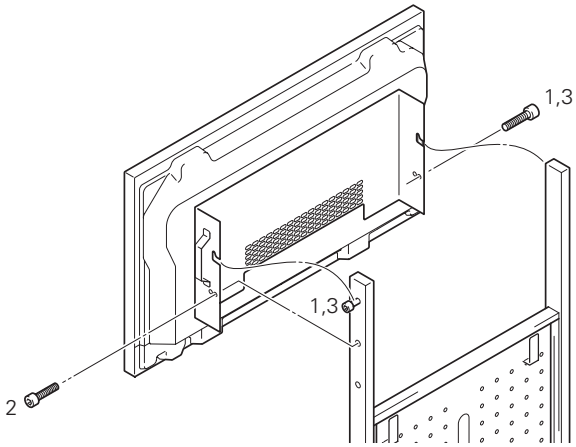


④ Mount a panel on the stand once the bracket has been attached

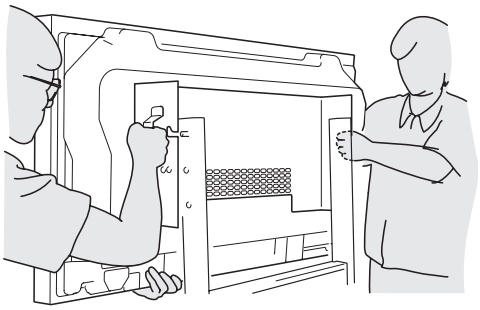
1. Align the holes on the protruding portion of the bracket onto the left and right bolts attached to the display stand.
2. Using two hexagonal bored bolts (M8 x 20 mm), attach the bracket to the left and right sides of the display stand. Insert and screw the bolts into the screw holes located at the bottom of the protruding part of the bracket and the screw holes of the display stand.
3. Screw the bolts of the protruding portion of the bracket firmly into place.

Note

For safety, alternately tighten each bolt two times or more until they are firmly fixed in place.

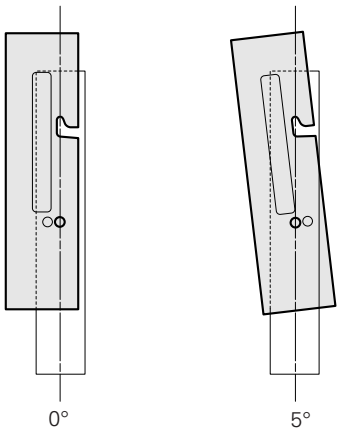


Caution To safely attach the brackets to the support columns, be sure to always have two people do this task as shown in the drawing.



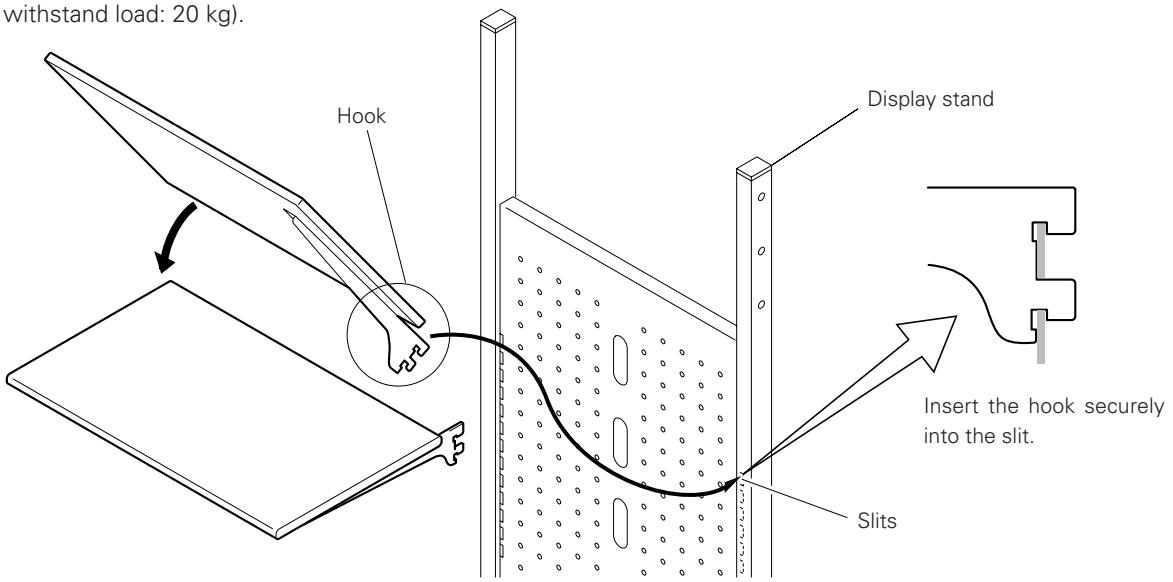
[Adjusting the angle of the Plasma Display screen]

For easier viewing, angle it forwards by altering the bracket attachment locations (5°).



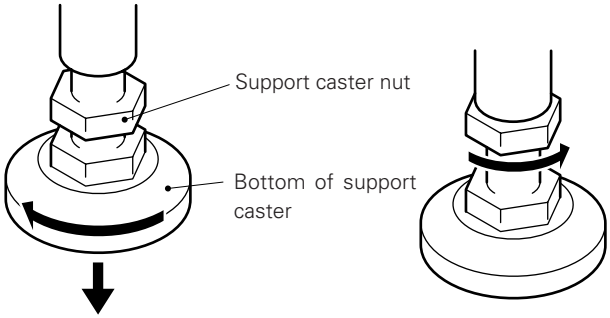
⑤ Attach the stand shelf to the display stand

Hold the stand shelf at a diagonal to the display stand and insert the upper portion of the hooked end of the shelf brackets into the slits located on the display stand. Return the shelf to a horizontal position to fix it into place (shelf withstand load: 20 kg).

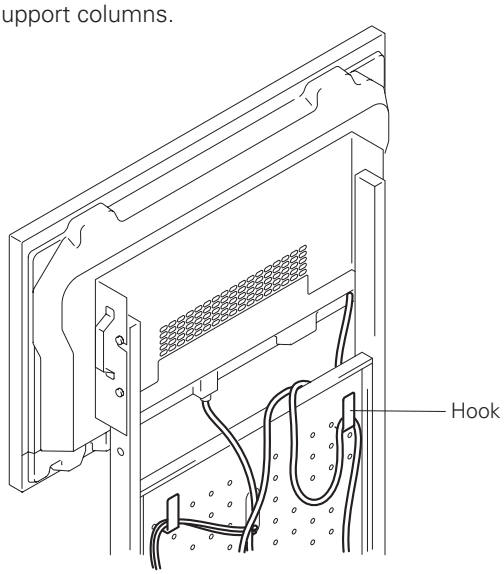


⑥ Adjust the support caster. When the mobile cart has been placed into position, be sure to adjust the support caster to fix into place.

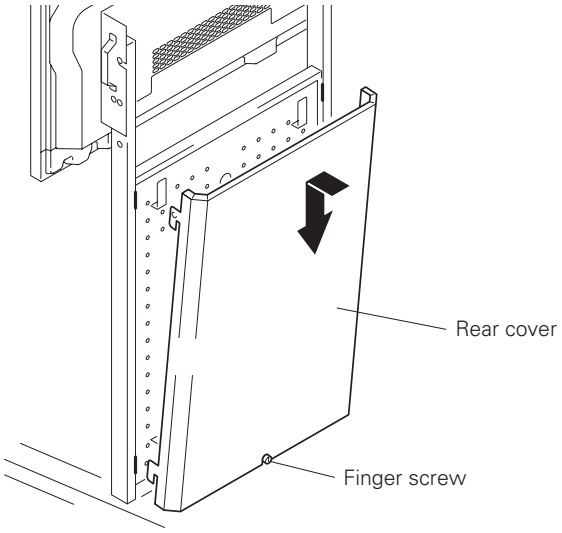
1. Turn the support caster in the direction indicated by the arrow until the bottom of the caster touches the mounting surface.
2. Turn the nut at the top of the caster in the direction indicated by the arrow to fix the caster into place.



⑦ Hang the cords from the hooks on the back of the support columns.



⑧ Attach the rear cover. Attach the rear cover and fix it in place by tightening the finger screws.
Be careful not to catch or pinch the cable with the rear cover.



4.10 PDP Bracket: PDK-5005 (Can be used only with the PDP-507CMX)

4.10.1 Specifications

External Dimensions ..... 1222 mm (W) × 736 mm (H) × 148 mm (D)
(48-1/8 in. (W) × 28-31/32 in. (H) × 5-13/16 in. (D))
(when mounted to the Plasma Display <PDP-507CMX>)
Weight ..... 4.1 kg (9.0 lbs.) (mounting hardware only)
39.6 kg (87.3 lbs.) (mounting hardware and Plasma Display <PDP-507CMX>)
Material ..... steel pipe for general structure (STKM-R), SPHC
Finish ..... Semi-matte black paint (Original Pioneer color)
Package dimensions ..... 850 mm (W) × 110 mm (H) × 130 mm (D)
(33-15/32 in. (W) × 4-11/32 in. (H) × 5-1/8 in. (D))
Package weight ..... 5.0 kg (11.0 lbs.)

Accessories

Vertical frames ..... × 2
Horizontal frames ..... × 2
Monitor mount bolts ..... × 4
Plus/minus screw with washers (M5 x 50 mm) .... × 8
Special eye bolts (M8 × 70 mm) ..... × 4
Spring washer nuts for M8 ..... × 8
Hexagonal nuts for M8 ..... × 8
Large flat washers for M8 ..... × 8
Small washers for M8 ..... × 4
Operating instructions ..... × 1
Mount contractor contract form ..... × 1

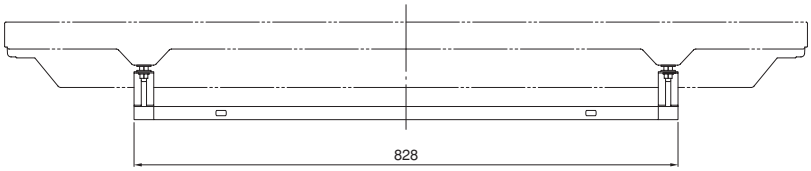
The appropriate types of screws and other mounting hardware will depend on the strength and composition of the ceiling and walls. Prepare them separately.

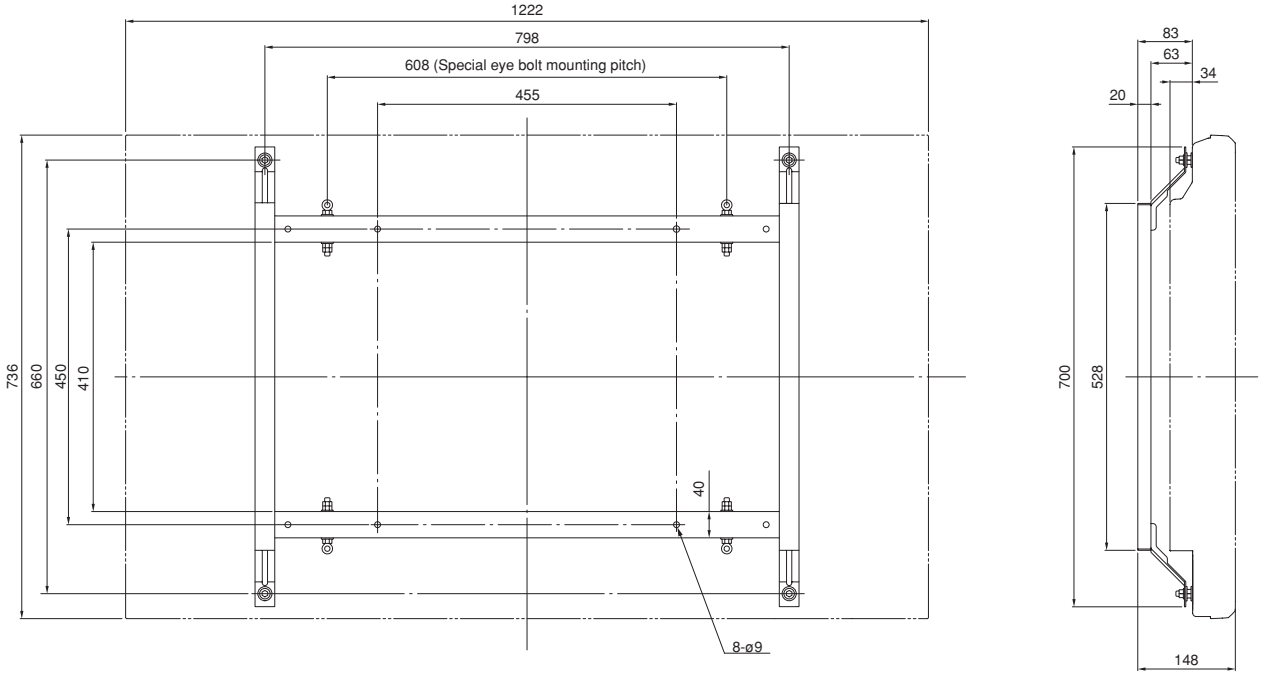
For the operating temperature restrictions of the unit please refer to the "3.5 Special Installation (PDP-507CMX) (pg. 35)" section

4.10.2 External Dimensions

(Units: mm)

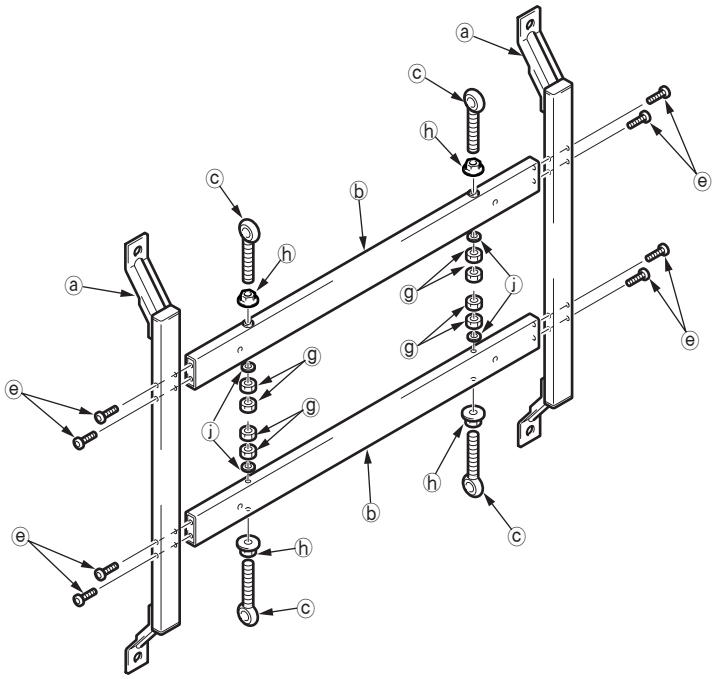
The mounting format is symmetrical from left to right and from top to bottom.



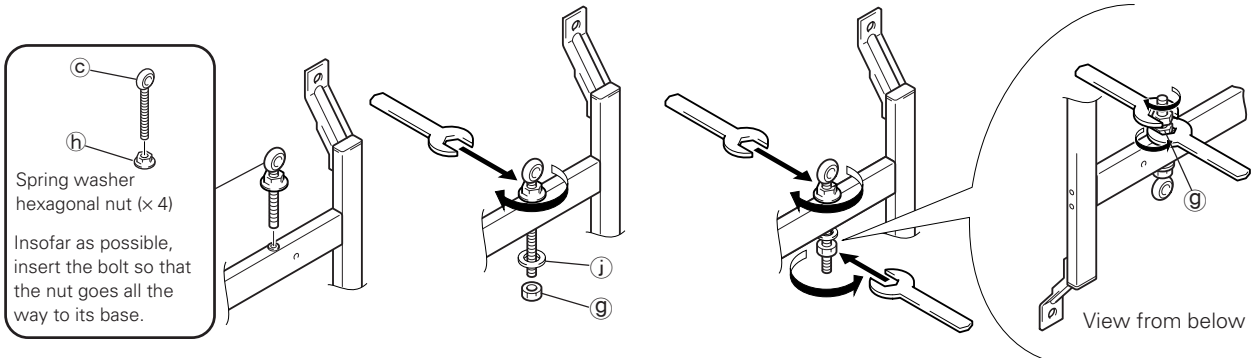


4.10.3 Assembly Procedure

① Temporarily fasten the vertical ⓐ and horizontal ⓑ frames using all of the M5 plus/minus screws with washers ⓔ.



② Attach the special eye bolts ⓒ to the spring washers ⓗ, and insert them into the appropriate holes. Secure the small flat washers ⓙ and nuts ⓖ (For additional safety, use double nuts).



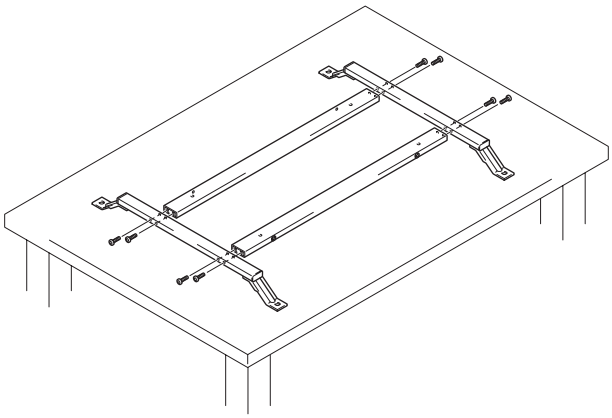
1. Attach the special eye bolts together with the M8 nuts to the main unit.
2. After passing the bolt through, secure it with the small flat washer and nut.
3. Tighten the nuts with spanners.
4. For additional safety, use double nuts(Tighten the two nuts against each other).

Caution

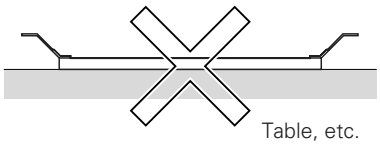
Never use special eye bolts except in the designated locations.
If they are used on the Plasma Display itself, internal damage may result.

③ Place the bracket on a level table or platform for the final tightening of the bolts.

Caution **The tightening the screws on the vertical and horizontal frames should be performed on a level table, as illustrated, and after the positions of the holes have been aligned.**



<Wrong>



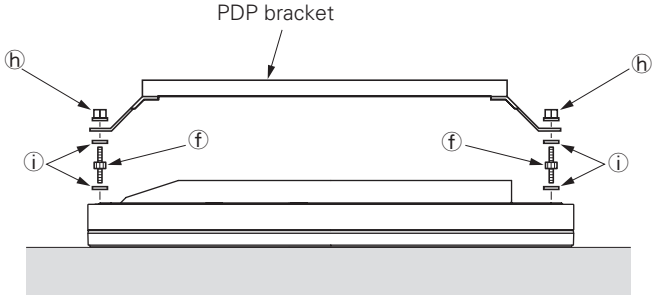
Table, etc.

If placed in this position, it will be difficult to align the holes.

④ Place the Plasma Display face down on a secure table, as shown in the illustration, in such a way as to prevent it from falling or getting scratched.

Warning

Place a sheet or protective cover to protect the display from scratches or damage.



⑤ Place a large flat washer ⓘ on each of the designated holes. Tighten well the monitor mounting bolts ⓕ from above.

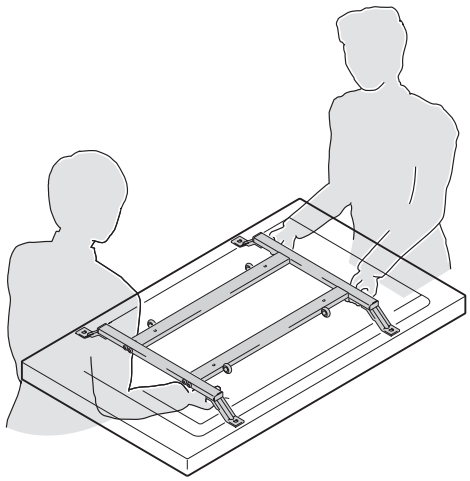
⑥ Place another large flat washer of each monitor mounting bolts. On top of these, mount the assembled PDP bracket.

Caution **Washers must be used. If the number and location of washers is incorrect, warping of the display unit may result.**

⑦ As the last step secure the M8 spring nuts ⓗ.

4.10.4 An example of use

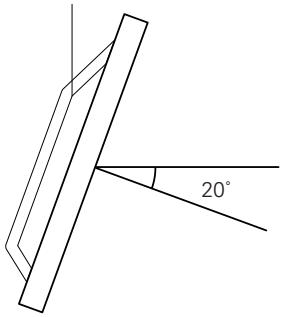
The unit can be mounted to any of Pioneer's mounting hardware while it is attached to the PDP bracket.
As illustrated, the bracket can be used as a handle for moving and installation.

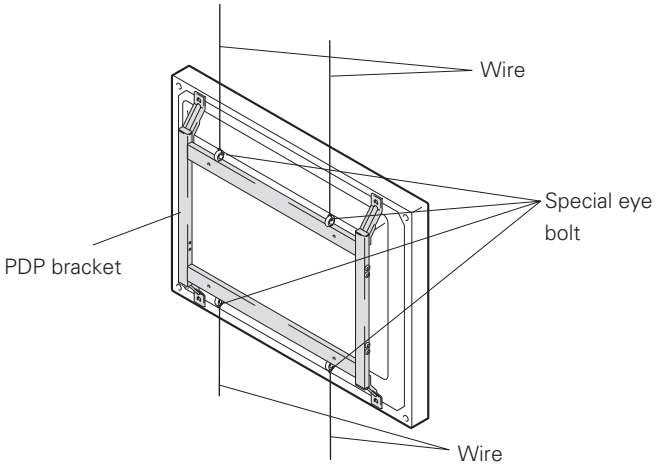


4.10.5 Wire hanging

Note

When hanging by wires using eyebolts (Plasma Display facing sideways), the display will tilt forward by approximately 20 degrees due to its weight distribution. Therefore, take this into consideration in advance when hanging it by wires.





Attach wires to the bolts, as indicated in the figure.
To attach the wires to the ceiling, secure two wires at two independent points for safety.

- To keep the Plasma Display main body from vibrating, fix the main body by attaching wire to the bottom bolt.
- Use wires strong enough to withstand a weight of 46.4 kg that is the total of the 35.5 kg of the Plasma Display, the 4.1 kg of the PDP bracket, and the 3.4 kg x 2 of the optional speakers.

During installation, strictly observe the related operating conditions in "3.5 Special installation (PDP-507CMX) (pg. 35)".

Caution

Use the Special eye bolt only at the specified locations.
Improper use of Special eye bolts within the Plasma Display main body may damage the display's blind nut.

Caution

When hanging by wires etc., do not add any devices other than the Plasma Display, PDP bracket, and the optional speakers nor hang it with a single wire, because there is a danger that excessive load will be applied, damaging the equipment.

Caution

Do not attempt to correct tilt by applying downward load with the wires. Doing so may apply excessive load upon and damage the wire connections and metal mounting fixture.

NO!

When installing the Plasma Display, do not use the handles as means of hanging the display.

4.11 Speaker System: PDP-S53-LR (Can be used only with the PDP-507CMX)

4.11.1 Specifications

External dimensions ..... 90 mm (W) × 736 mm (H) × 96 mm (D) (Not including attachment plates; Qty: 1)
(3-17/32 in. (W) × 28-31/32 in. (H) × 3-25/32 in. (D))
When mounted to the Plasma Display <PDP-507CMX>:
1403 mm (W) × 736 mm (H) × 99 mm (D)
(55-1/4 in. (W) × 28-31/32 in. (H) × 3-29/32 in. (D))

Weight ..... 5.8 kg (12.8 lbs.)
41.3 kg (91.1 lbs.) (when mounted to the Plasma Display <PDP-507CMX>)

Dimensions of packaging ..... 793 mm (W) × 276 mm (H) × 358 mm (D)
(31-7/32 in. (W) × 10-7/8 in. (H) × 14-3/32 in. (D))

Package weight ..... 7.9 kg (17.4 lbs.)

Model ..... 2-way, 3-speaker system (bass-reflection mode)

Woofer (for low tones) ..... 8 cm cone type × 2

Tweeter (for high tones) .... 5 cm cone type × 1

Nominal impedance ..... 6 Ω

Frequency Range ..... 60 Hz to 35 000 Hz

Sensitivity ..... 85 dB/W (at 1 m distance)

Permissible input:

Max. input ..... 60 W

Rated input ..... 20 W

Layers of packing ..... 10 layers

Accessory parts (for two speakers)

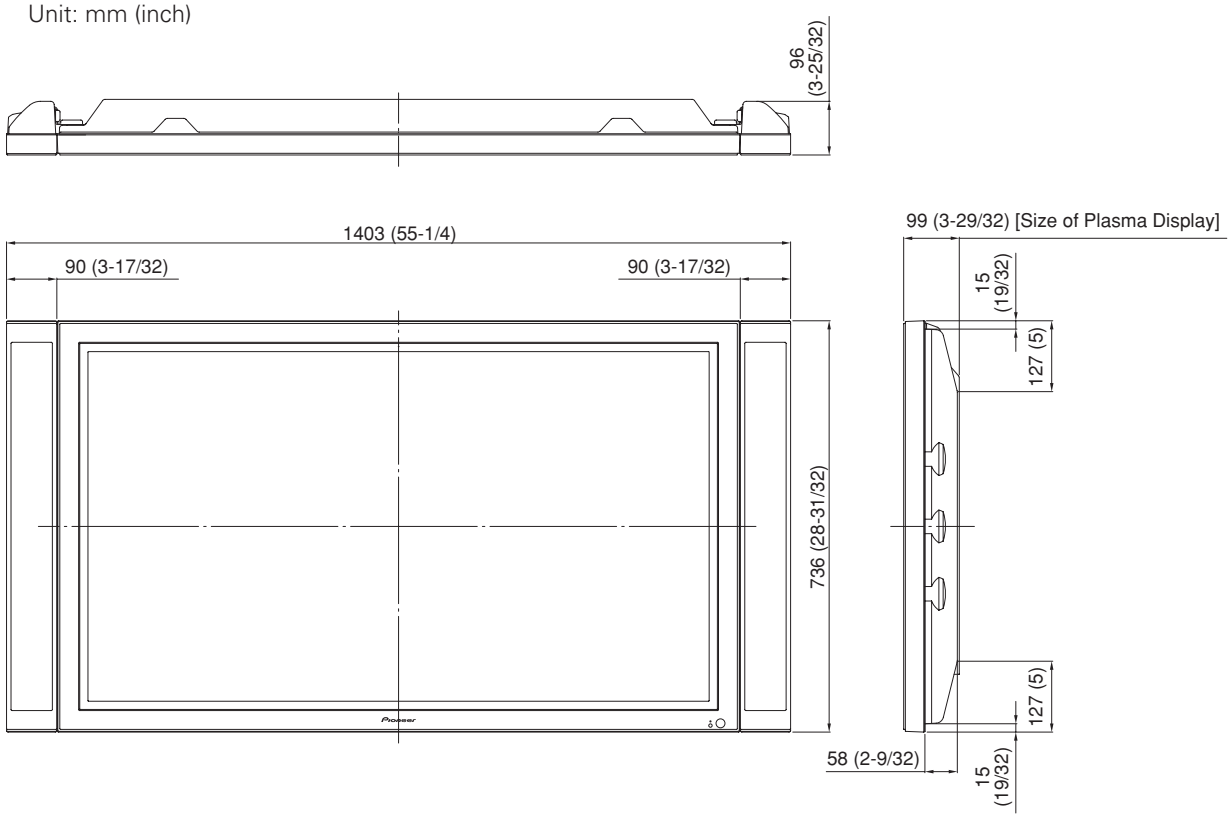
Cushions ..... × 2
Speaker cords ..... × 2
Cord clampers ..... × 2
Screws (M8) ..... × 4
Operating instructions ..... × 1

⚠ Cautions

The sound may be irregular if there is a CRT type PC monitor close to the speakers. To prevent this, keep speakers separated from the PC if you are using a CRT monitor.

4.11.2 External Dimensions (when mounted to the Plasma Display)

Unit: mm (inch)

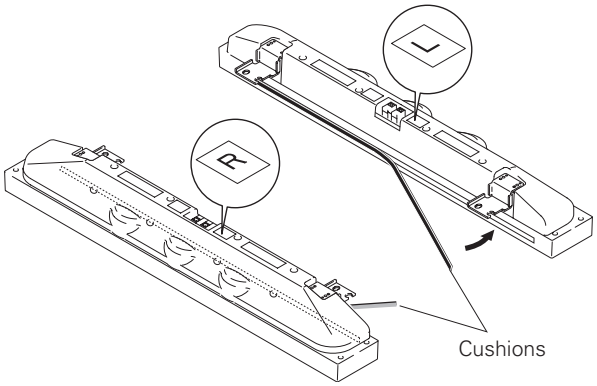


4.11.3 Installation on the Plasma Display

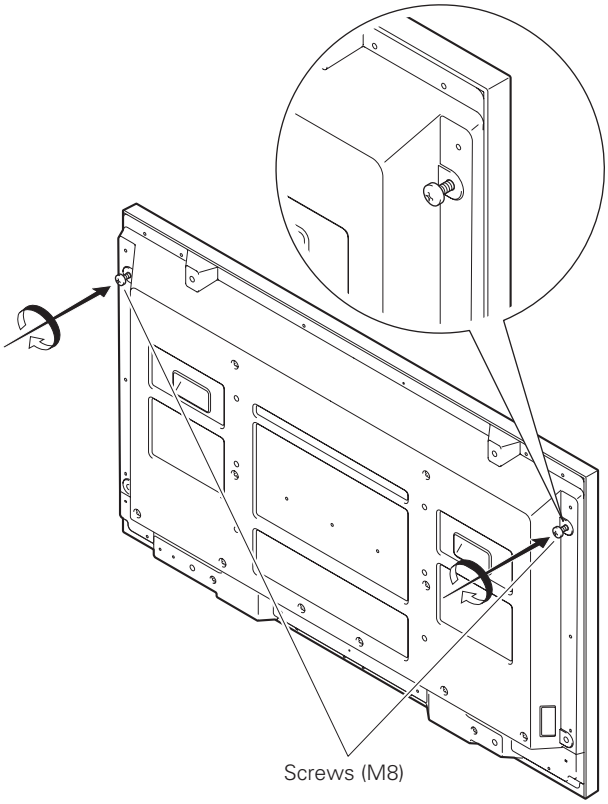
1) Installation procedure

Install the speaker system according to the steps (1) through (4).

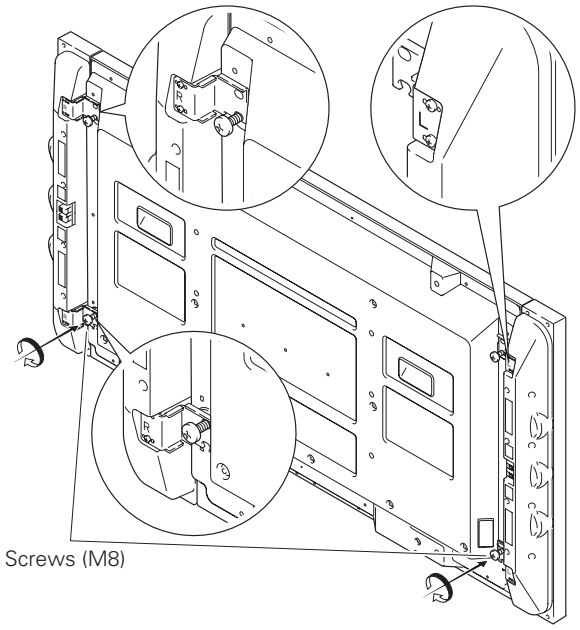
(1) Remove the seals from the cushions and then attach the cushions to the sides of the speakers in the locations indicated in the diagram below.



(2) Screw the M8 screws loosely into the screw holes located at the top of the Plasma Display (two locations).

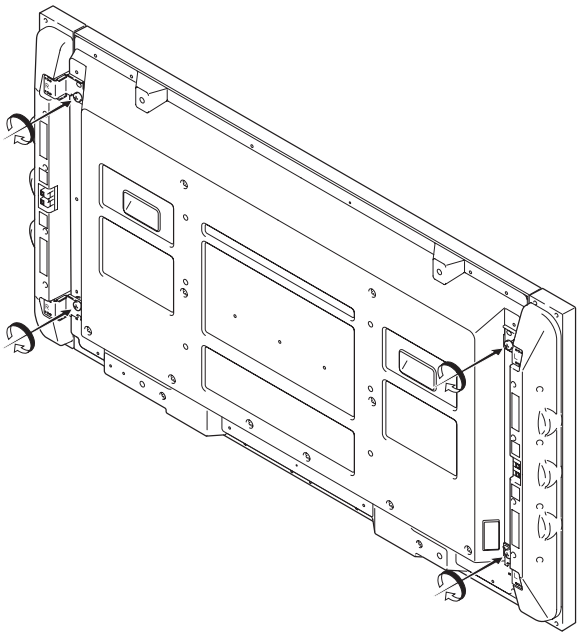


(3) Fit the hooks at the top of the speakers over the screws just inserted, then align the holes in the hooks of the speakers over the screw holes at the bottom of the Plasma Display and use the M8 screws to screw loosely into place.



(4) Tighten the screws just inserted firmly into place (four locations).

Tighten the screws while pushing the speakers lightly against the Plasma Display. Check to be sure that all four screws have been screwed firmly into place.



⚠ Warning

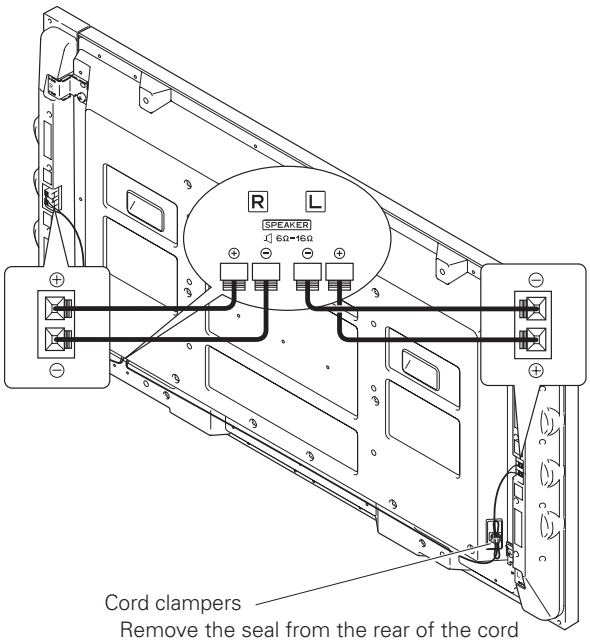
Never hold the speakers when speakers are attached to the monitor to move the monitor. Doing so might result in the monitor falling, and this in turn might result in bodily injury.

2) Connect the cords

(Turn off the power of all connected units before connecting the cords.)

Use the provided speaker cords to connect the R/L speaker jacks of the monitor to the speaker jacks of the speakers.

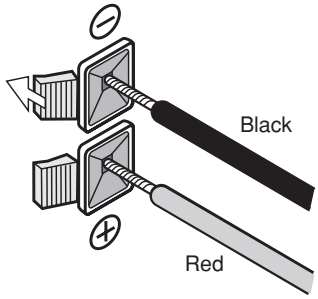
Once the cords have been connected, pull on the cords lightly to make sure that they have been connected firmly to the speaker jacks. An improper connection might result in the sound being interrupted or the appearance of noise in the output sound.



Cord clampers

Remove the seal from the rear of the cord clampers, attach the clampers in the desired position, and clamp the cords into place.

Note that the speaker cords have positive and negative ends, and that you should be sure to insert them correctly.



Press the button of the speaker jack and keep it pressed down as you insert the wire of the speaker cord and then release the button.

3) Care and Maintenance

When the cabinet gets dirty...

- Wipe with a lit-free, soft, dry cloth.
  If the cabinet is heavily soiled, soak a cloth in a neutral detergent solution, wring well, and wipe the cabinet. Remove any remaining moisture by wiping with a dry colth.
  If you want to use a chemical cloth for cleaning, read any caution information provided with the chemical cloth product.
- Do not use solvent such as thinner or benzine for cleaning. These chemical can damage the surface finish, deteriorating or stripping the coating.
- To remove dust from the speaker nets, use a vacuum cleaner's. Avoid applying the vacuum cleaner hose directly to the speakers without using a brush adapter or using a nozzle adapter.
- To prevent damage to the cabinet and speaker nets, do not scrach or hit them with hard objects. Also, do not stab the speaker nets with sharp objects.

Do not apply volatile chemicals such as insecticide on the cabinet. Avoid leaving a rubber or vinyl products in contact with the cabinet for prolonged periods. The surface finish can deteriorate or the coating may be stripped off.

4.12 Speaker System: PDP-S56-LR (Can be used only with the PDP-427CMX)

4.12.1 Specifications

External dimensions ..... 90 mm (W) × 610 mm (H) × 94 mm (D) (Not including attachment plates; Qty: 1)
(3-17/32 in. (W) × 24-1/32 in. (H) × 3-11/16 in. (D))
When mounted to the Plasma Display <PDP-427CMX>:
1204 mm (W) × 610 mm (H) × 98 mm (D)
(47-13/32 in. (W) × 24-1/32 in. (H) × 3-27/32 in. (D))

Weight ..... 3.8 kg (8.4 lbs.)
34.3 kg (75.6 lbs.) (when mounted to the Plasma Display <PDP-427CMX>)

Dimensions of packaging ..... 670 mm (W) × 266 mm (H) × 330 mm (D)
(26-3/8 in. (W) × 10-15/32 in. (H) × 13 in. (D))

Package weight ..... 6.2 kg (13.7 lbs.)

Model ..... 2-way, 3-speaker system (bass-reflection mode)

Woofer (for low tones) ..... 8 cm cone type × 1

Tweeter (for high tones) .... 5 cm cone type × 1

Nominal impedance ..... 6 Ω

Frequency Range ..... 80 Hz to 20 000 Hz

Sensitivity ..... 84 dB/W (at 1 m distance)

Permissible input:

Max. input ..... 30 W

Rated input ..... 10 W

Layers of packing ..... 10 layers

Accessory parts (for 2 speakers)

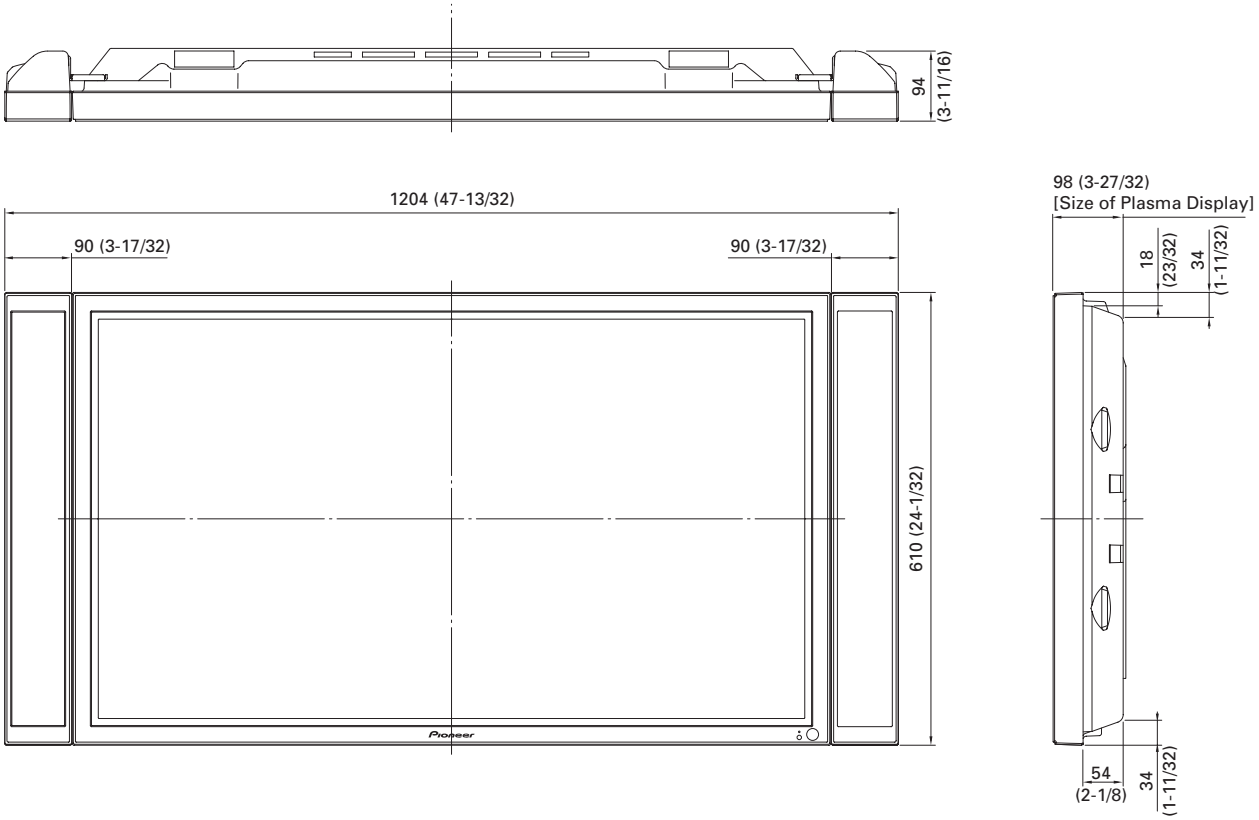
Cushions ..... × 2
Connection cords ..... × 2
Cord clampers ..... × 2
Screws (M8) ..... × 4
Operating instructions ..... × 1

⚠ Cautions

The sound may be irregular if there is a CRT type PC monitor close to the speakers. To prevent this, keep speakers separated from the PC if you are using a CRT monitor.

4.12.2 External Dimensions (when mounted to the Plasma Display)

Units: mm (inch)



4.12.3 Installation on the Plasma Display

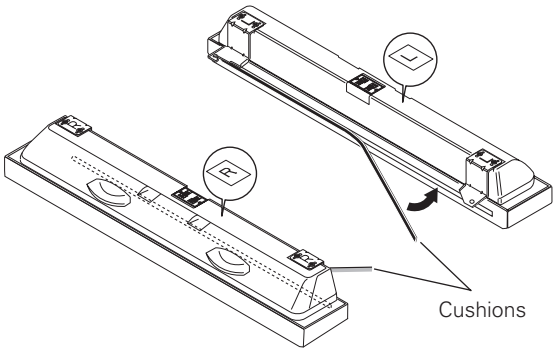
1) Installation procedure

Install the speaker system according to the steps (1) through (4).

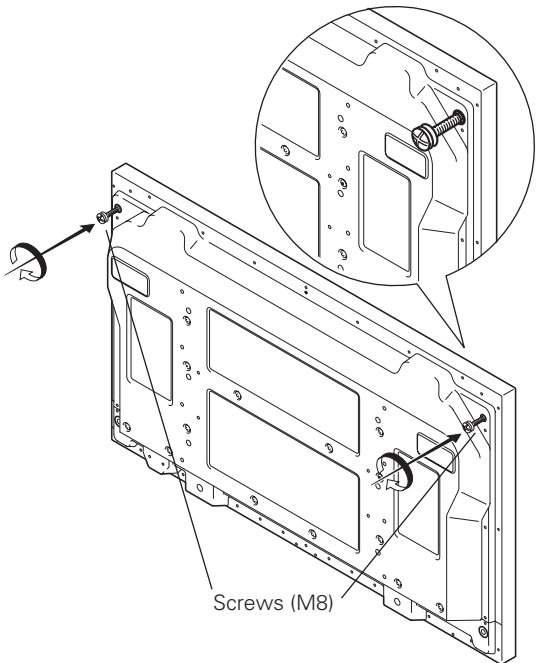
Notes

- The speakers are designed specifically for the left (L) and right (R) sides of the Plasma Display. When mounting them on the display, refer to the letters ("L" and "R") indicated on the speakers' hooks.
- This speaker is of an antimagnetic design; however, depending on its placement such as bringing the speaker into the vicinity of a monitor other than a Plasma Display, the speaker may cause irregular noise or other effects. Should this occur, please move the speaker away from the monitor.

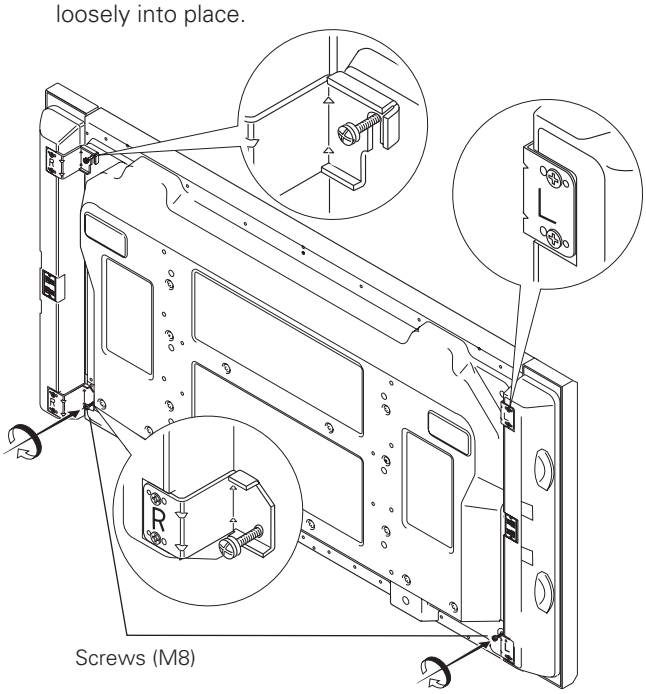
(1) Remove the seals from the cushions and then attach the cushions to the sides of the speakers in the locations indicated in the diagram below.



(2) Screw the M8 screws loosely into the screw holes located at the top of the Plasma Display (two locations).

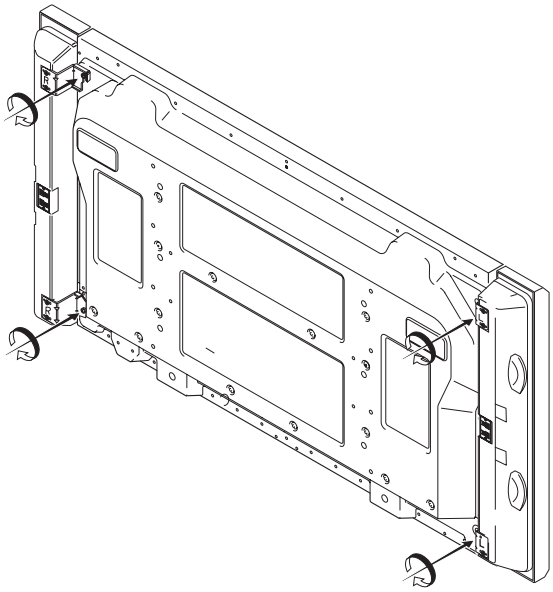


(3) Fit the hooks at the top of the speakers over the screws just inserted, then align the holes in the hooks of the speakers over the screw holes at the bottom of the Plasma Display and use the M8 screws to screw loosely into place.



(4) Tighten the screws just inserted firmly into place (four locations).

* Tighten the screws while pushing the speakers lightly against the Plasma Display. Check to be sure that all four screws have been screwed firmly into place.



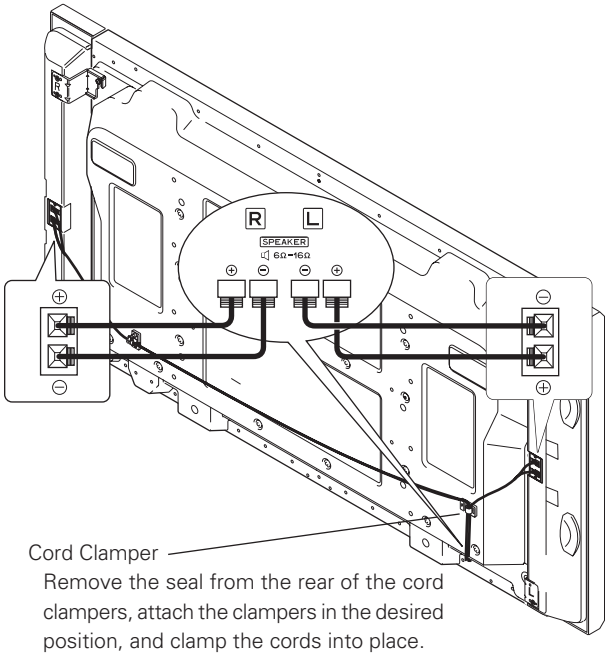
⚠ Warning

Never hold the speakers when speakers are attached to the monitor to move the monitor. Doing so might result in the monitor falling, and this in turn might result in bodily injury.

2) Connect the cords

(Turn off the power of all connected units before connecting the cords.)

Connect the display's SPEAKER R and L terminals with the speakers' terminals using the included connection cords.



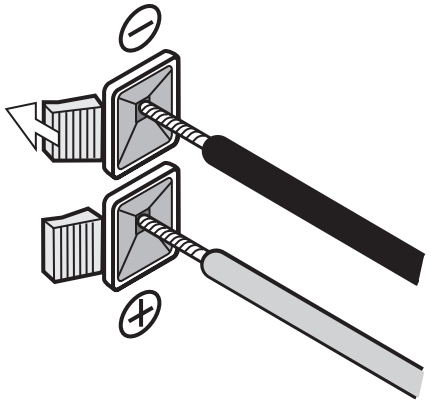
Cord Clamper

Remove the seal from the rear of the cord clampers, attach the clampers in the desired position, and clamp the cords into place.

After connecting the speaker terminals with the connection cords, confirm that the cords are connected at the terminal securely by tugging on the cords. A loose connection may cause sound dropouts or noise.

There is polarity ⊕⊖ with the conductor of each connection cord.

Connect each conductor to the correct terminal.



While holding the button of each speaker terminal, insertaconductor of the connection cord.

3) Care and Maintenance

When the cabinet gets dirty...

- Wipe with a lit-free, soft, dry cloth.
  If the cabinet is heavily soiled, soak a cloth in a neutral detergent solution, wring well, and wipe the cabinet. Remove any remaining moisture by wiping with a dry colth.
  If you want to use a chemical cloth for cleaning, read any caution information provided with the chemical cloth product.
- Do not use solvent such as thinner or benzine for cleaning. These chemical can damage the surface finish, deteriorating or stripping the coating.
- To remove dust from the speaker nets, use a vacuum cleaner's. Avoid applying the vacuum cleaner hose directly to the speakers without using a brush adapter or using a nozzle adapter.
- To prevent damage to the cabinet and speaker nets, do not scrach or hit them with hard objects. Also, do not stab the speaker nets with sharp objects.

Do not apply volatile chemicals such as insecticide on the cabinet. Avoid leaving a rubber or vinyl products in contact with the cabinet for prolonged periods. The surface finish can deteriorate or the coating may be stripped off.

5.1 Before Beginning Adjustment

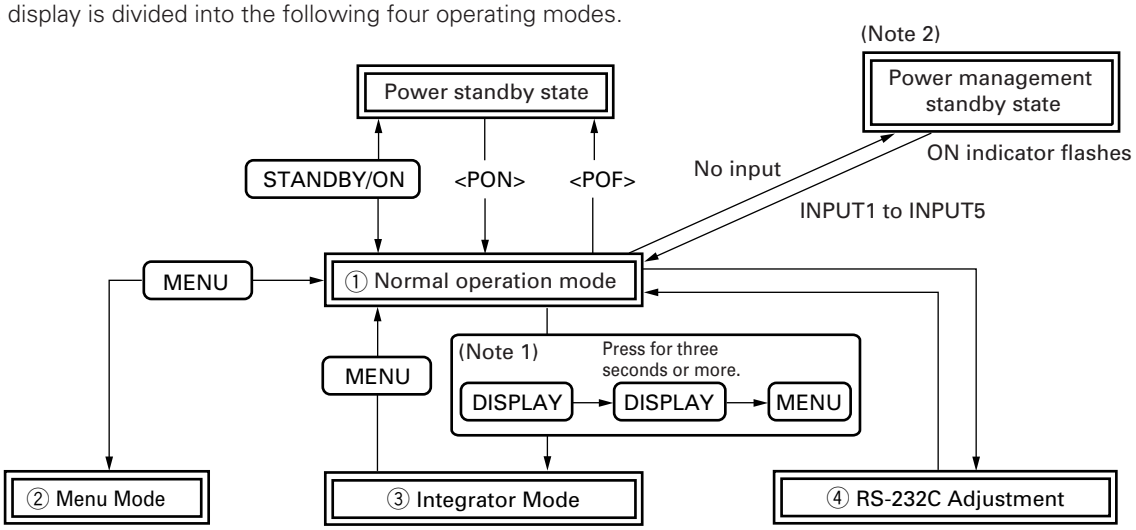
There are three methods for adjusting this display:

- Main control panel
- Remote control
- Personal computer (RS-232C control)

Carefully read and gain a good understanding of this section before beginning adjustment.
Items that apply only when a PDA-5003 or PDA-5004 is installed, are indicated with a '★'.

5.1.1 Operation Mode

This display is divided into the following four operating modes.



indicates the operation modes and states
indicates button controls on the remote control or main-control panel
< > indicates controls by RS-232C commands

(Note 1) Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).
(Note 2) Power management standby state exists only when power management is set.

① Normal Operation Mode

This mode is for displaying signals.
In this mode the following basic controls are available:

- Switching to the power standby state
- Switching the input
- Switching the screen
- Adjusting the volume
- Muting the sound (remote control only)
- Setting the AUTO SET UP
- Applying the POINT ZOOM (remote control only)
- Accessing Multi screens (remote control only)
- Activating the menu mode or the integrator mode

In addition, some control via RS-232C commands is possible (Refer to section 5.5.5, "List of RS-232C Commands" (pg. 267)).

② Menu Mode

This mode is for adjusting the image quality, changing the screen position, and assigning various settings.
For details, refer to section 5.3, "Menu Mode" (pg. 173).
In this mode, it is possible to change adjustment data within a limited range. These adjustments are based on values set in the integrator mode or RS-232C commands (to be described later).
For details, refer to section 5.3, "Menu Mode" (pg. 173).

③ Integrator Mode

This mode provides an adjustment function for integrator options.
This mode has white-balance adjustment and various detailed settings in addition to the items in the menu mode.
For details, refer to section 5.4, "Integrator Mode" (pg. 214).

④ RS-232C Adjustment

In this mode, a personal computer is used to perform various adjustments and settings.
There are some items that can only be configured in this mode.

Note

When connecting multiple sets and in this mode, assign an ID before making adjustments or settings.

For details, refer to section 5.5, "RS-232C Adjustment" (pg. 262).

5.1.2 Combined Use of the Remote Control, Main-control Panel, and RS-232C Commands

- The remote control and main-control panel can be operated together.
  (Example) It is possible to access the Menu Mode using the main-control panel then perform an adjustment using the remote control.
- With the remote-control (or main-control panel) buttons and RS-232C commands, the most resent control has priority.

5.1.3 List of Input Correspondence Signals

1) Input correspondence signals (personal computer signals)

INPUT1

[PDP-507CMX]

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
640x400	70.1 Hz	31.5 kHz	◎ 640x400		○ 1365x768	NEC PC-9800
720x400	70.1 Hz	31.5 kHz	◎ 720x400		○ 1365x768	NEC PC-9800
	85.1 Hz	37.9 kHz	↑		↑	
640x480	59.9 Hz	31.5 kHz	◎ 640x480	○ 1024x768	○ 1365x768	
	66.7 Hz	35.0 kHz	↑	↑	↑	Apple Macintosh 13"
	72.8 Hz	37.9 kHz	↑	↑	↑	
	75 Hz	37.5 kHz	↑	↑	↑	
	85 Hz	43.3 kHz	↑	↑	↑	
	100.4 Hz	51.1 kHz	↑	↑	↑	I/O DATA
	120.4 Hz	61.3 kHz	↑	↑	↑	I/O DATA
848x480	60 Hz	31.0 kHz	◎ 848x480		○ 1365x768	
852x480	60 Hz	31.7 kHz	◎ 852x480		○ 1365x768	I/O DATA
800x600	56.3 Hz	35.2 kHz	◎ 800x600	○ 1024x768	○ 1365x768	
	60.3 Hz	37.9 kHz	↑	↑	↑	
	72.2 Hz	48.1 kHz	↑	↑	↑	
	75 Hz	46.9 kHz	↑	↑	↑	
	85.1 Hz	53.7 kHz	↑	↑	↑	
	99.8 Hz	63.0 kHz	↑	↑	↑	I/O DATA
	120 Hz	75.7 kHz	↑	↑	↑	I/O DATA
832x624	74.6 Hz	49.7 kHz	◎ 832x624	○ 1024x768	○ 1365x768	Apple Macintosh 16"
1024x768	60 Hz	48.4 kHz	◎ 1024x768		○ 1365x768	
	60 Hz	49.7 kHz	↑		↑	Work station (SGI)
	70.1 Hz	56.5 kHz	↑		↑	
	75 Hz (74.9 Hz)	60.0 kHz (60.2 kHz)	↑		↑	( ) indicates Apple Macintosh 19"
	85 Hz	68.7 kHz	↑		↑	
	100.6 Hz	80.5 kHz	↑		↑	I/O DATA
	119.4 Hz	95.5 kHz	↑		↑	
1280x768	56.2 Hz	45.1 kHz	◎ 1280x768		△ 1365x768	
	59.8 Hz	48 kH z	↑		↑	
	69.8 Hz	56 kH z	↑		↑	
1360x768	60 Hz	47.7 kHz	◎ 1360x768		△ 1365x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1365x768	I/O DATA
1280x800	59.8 Hz	49.7 kHz			△ 1365x768	CVT
1280x854	60 Hz	53.1 kHz			△ 1365x768	PC
1152x864	60 Hz	53.7 kHz		△ 1024x768	△ 1365x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x870	75.1 Hz	68.7 kHz		△ 1024x768	△ 1365x768	Apple Macintosh 21"
1152x900	66 Hz	61.8 kHz		△ 1024x768	△ 1365x768	Sun Microsystems LO
	76 Hz	71.7 kHz		↑	↑	Sun Microsystems HI

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1440x900	59.9 Hz	55.9 kHz			△ 1365x768	Apple Macintosh 17"
1280x960	60 Hz	60.0 kHz		△ 1024x768	△ 1365x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	63.9 kHz		△ 1024x768	△ 1365x768	Work station (SGI)
	60 Hz	64.0 kHz		↑	↑	
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	75 Hz	80.0 kHz		↑	↑	
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	85 Hz	91.1 kHz		↑	↑	
	100.1 Hz	108.5 kHz		↑	↑	I/O DATA
1400x1050	60 Hz	65.3 kHz		△ 1024x768	△ 1365x768	
	74.9 Hz	82.3 kHz		↑	↑	
	85 Hz	93.9 kHz		↑	↑	
1680x1050	60 Hz	65.3 kHz			△ 1365x768	
1600x1200	60 Hz	75.0 kHz		△ 1024x768	△ 1365x768	
	65 Hz	81.3 kHz		↑	↑	
	70 Hz	87.5 kHz		↑	↑	
	75 Hz	93.8 kHz		↑	↑	
	85 Hz	106.3 kHz		↑	↑	
1920x1200	59.9 Hz	74.6 kHz			△ 1365x768	CVT
1920x1200RB*	60 Hz	74.0 kHz			△ 1365x768	CVT

◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary
○ : Picture will be enlarged but some fine detail will be hard to see.
△ : Simple reproduction. Fine detail will not be reproduced.
RB*: Abbreviation for Reduce Blanking that is set by CVT.

INPUT2
[PDP-507CMX]

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
720x400	70.1 Hz	31.5 kHz	◎ 720x400		○ 1365x768	NEC PC-9800
	85.1 Hz	37.9 kHz	↑		↑	
640x480	59.9 Hz	31.5 kHz	◎ 640x480	○ 1024x768	○ 1365x768	
	72.8 Hz	37.9 kHz	↑	↑	↑	
	75 Hz	37.5 kHz	↑	↑	↑	
	85 Hz	43.3 kHz	↑	↑	↑	
	100.4 Hz	51.1 kHz	↑	↑	↑	
	120.4 Hz	61.3 kHz	↑	↑	↑	
848x480	60 Hz	31.0 kHz	◎ 848x480		○ 1365x768	
852x480	60 Hz	31.7 kHz	◎ 852x480		○ 1365x768	
800x600	56.3 Hz	35.2 kHz	◎ 800x600	○ 1024x768	○ 1365x768	
	60.3 Hz	37.9 kHz	↑	↑	↑	
	72.2 Hz	48.1 kHz	↑	↑	↑	
	75 Hz	46.9 kHz	↑	↑	↑	
	85.1 Hz	53.7 kHz	↑	↑	↑	
	99.8 Hz	63.0 kHz	↑	↑	↑	
	120 Hz	75.7 kHz	↑	↑	↑	

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1024x768	60 Hz	48.4 kHz	◎ 1024x768		○ 1365x768	
	60 Hz	49.7 kHz	↑		↑	Work station (SGI)
	70.1 Hz	56.5 kHz	↑		↑	
	75 Hz	60.0 kHz	↑		↑	
	85 Hz	68.7 kHz	↑		↑	
	100.6 Hz	80.5 kHz	↑		↑	
	119.4 Hz	95.5 kHz	↑		↑	
1280x768	56.2 Hz	45.1 kHz	◎ 1280x768		△ 1365x768	
	59.8 Hz	48 kH z	↑		↑	
	69.8 Hz	56 kH z	↑		↑	
1280x800	59.8 Hz	49.7 kHz			△ 1365x768	
1280x854	60 Hz	53.1 kHz			△ 1365x768	
1360x768	60 Hz	47.7 kHz	◎ 1360x768		△ 1365x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1365x768	I/O DATA
1152x864	60 Hz	53.7 kHz		△ 1024x768	△ 1365x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x900	66 Hz	61.8 kHz		△ 1024x768	△ 1365x768	Sun Microsystems LO
	76 Hz	71.7 kHz		↑	↑	Sun Microsystems HI
1440x900	59.9 Hz	55.9 kHz			△ 1365x768	Apple Macintosh17"
1280x960	60 Hz	60.0 kHz		△ 1024x768	△ 1365x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	63.9 kHz		△ 1024x768	△ 1365x768	Work station (SGI)
	60 Hz	64.0 kHz		↑	↑	
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	75 Hz	80.0 kHz		↑	↑	
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	85 Hz	91.1 kHz		↑	↑	
1400x1050	60 Hz	65.3 kHz		△ 1024x768	△ 1365x768	
	74.9 Hz	82.3 kHz		↑	↑	
1680x1050	60 Hz	65.3 kHz			△ 1365x768	
1920x1080	50 Hz	56.2 kHz			△ 1365x768	
	60 Hz	67.5 kHz			↑	
1600x1200	60 Hz	75.0 kHz		△ 1024x768	△ 1365x768	CVT
1920x1200RB*	60 Hz	74.0 kHz			△ 1365x768	

◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary.
○ : Picture will be enlarged but some fine detail will be hard to see.
△ : Simple reproduction. Fine detail will not be reproduced.
RB*: Abbreviation for Reduce Blanking that is set by CVT.

Note

In rare cases, the picture may not translate properly when switching between compatible signal formats on the output device (PC, etc.). Should this happen, turn off the power and then turn it back on again.

INPUT1

[PDP-427CMX]

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
640x400	70.1 Hz	31.5 kHz			○ 1024x768	NEC PC-9800
720x400	70.1 Hz	31.5 kHz			○ 1024x768	NEC PC-9800
	85.1 Hz	37.9 kHz			↑	
640x480	59.9 Hz	31.5 kHz		○ 768x768	○ 1024x768	
	66.7 Hz	35.0 kHz		↑	↑	Apple Macintosh 13″
	72.8 Hz	37.9 kHz		↑	↑	
	75 Hz	37.5 kHz		↑	↑	
	85 Hz	43.3 kHz		↑	↑	
	100.4 Hz	51.1 kHz		↑	↑	I/O DATA
	120.4 Hz	61.3 kHz		↑	↑	I/O DATA
848x480	60 Hz	31.0 kHz			○ 1024x768	
852x480	60 Hz	31.7 kHz			○ 1024x768	I/O DATA
800x600	56.3 Hz	35.2 kHz		○ 768x768	○ 1024x768	
	60.3 Hz	37.9 kHz		↑	↑	
	72.2 Hz	48.1 kHz		↑	↑	
	75 Hz	46.9 kHz		↑	↑	
	85.1 Hz	53.7 kHz		↑	↑	
	99.8 Hz	63.0 kHz		↑	↑	I/O DATA
	120 Hz	75.7 kHz		↑	↑	I/O DATA
832x624	74.6 Hz	49.7kHz		○ 768x768	○ 1024x768	Apple Macintosh 16″
1024x768	60 Hz	48.4 kHz	◎ 1024x768	○ 768x768		
	60 Hz	49.7 kHz	↑	↑		Work station (SGI)
	70.1 Hz	56.5 kHz	↑	↑		
	75 Hz (74.9 Hz)	60.0 kHz (60.2 kHz)	↑	↑		( ) indicates Apple Macintosh 19″
	85 Hz	68.7 kHz	↑	↑		
	100.6 Hz	80.5 kHz	↑	↑		I/O DATA
	119.4 Hz	95.5 kHz	↑	↑		
1280x768	56.2 Hz	45.1 kHz			△ 1024x768	
	59.8 Hz	48 kHz			↑	
	69.8 Hz	56 kHz			↑	
1360x768	60 Hz	47.7 kHz			△ 1024x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1024x768	I/O DATA
1280x800	59.8 Hz	49.7 kHz			△ 1024x768	CVT
1280x854	60 Hz	53.1 kHz			△ 1024x768	PC
1152x864	60 Hz	53.7 kHz		△ 768x768	△ 1024x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x870	75.1 Hz	68.7 kHz		△ 768x768	△ 1024x768	Apple Macintosh 21″
1152x900	66 Hz	61.8 kHz		△ 768x768	△ 1024x768	Sun Microsystems LO
	76 Hz	71.7 kHz		↑	↑	Sun Microsystems HI

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1440x900	59.9 Hz	55.9 kHz			△ 1024x768	Apple Macintosh 17"
1280x960	60 Hz	60.0 kHz		△ 768x768	△ 1024x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	64.0 kHz		△ 720x768	△ 1024x768	Work station (SGI)
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	75 Hz	80.0 kHz		↑	↑	
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	85 Hz	91.1 kHz		↑	↑	
	100.1 Hz	108.5 kHz		↑	↑	I/O DATA
1400x1050	60 Hz	65.3 kHz		△ 768x768	△ 1024x768	
	75 Hz	82.3 kHz		↑	↑	
	85 Hz	93.9 kHz		↑	↑	
1680x1050	60 Hz	65.3 kHz			△ 1024x768	
1600x1200	60 Hz	75.0 kHz		△ 768x768	△ 1024x768	
	65 Hz	81.3 kHz		↑	↑	
	70 Hz	87.5 kHz		↑	↑	
	75 Hz	93.8 kHz		↑	↑	
	85 Hz	106.3 kHz		↑	↑	
1920x1200	59.9 Hz	74.6 kHz			△ 1024x768	CVT
1920x1200RB*	60 Hz	74.0 kHz			△ 1024x768	CVT

◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary
○ : Picture will be enlarged but some fine detail will be hard to see.
△ : Simple reproduction. Fine detail will not be reproduced.
RB*: Abbreviation for Reduce Blanking that is set by CVT.

INPUT2

[PDP-427CMX]

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
640x480	59.9 Hz	31.5 kHz		○ 768x768	○ 1024x768	
	72.8 Hz	37.9 kHz		↑	↑	
	75 Hz	37.5 kHz		↑	↑	
	85 Hz	43.3 kHz		↑	↑	
	100.4 Hz	51.1 kHz		↑	↑	
	120.4 Hz	61.3 kHz		↑	↑	
720x400	70.1 Hz	31.5 kHz			○ 1024x768	NEC PC-9800
	85.1 Hz	37.9 kHz			↑	
848x480	60 Hz	31.0 kHz			○ 1024x768	
852x480	60 Hz	31.7 kHz			○ 1024x768	
800x600	56.3 Hz	35.2 kHz		○ 768x768	○ 1024x768	
	60.3 Hz	37.9 kHz		↑	↑	
	72.2 Hz	48.1 kHz		↑	↑	
	75 Hz	46.9 kHz		↑	↑	
	85.1 Hz	53.7 kHz		↑	↑	
	99.8 Hz	63.0 kHz		↑	↑	
	120 Hz	75.7 kHz		↑	↑	

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1024x768	60 Hz	48.4 kHz	◎ 1024x768	○ 768x768		
	60 Hz	49.7 kHz	↑	↑		Work station (SGI)
	70.1 Hz	56.5 kHz	↑	↑		
	75 Hz	60.0 kHz	↑	↑		
	85 Hz	68.7 kHz	↑	↑		
	100.6 Hz	80.5 kHz	↑	↑		
1280x768	56.2 Hz	45.1 kHz			△ 1024x768	
	59.8 Hz	48 kHz			↑	
	69.8 Hz	56 kHz			↑	
1280x800	59.8 Hz	49.7 kHz			△ 1024x768	
1280x854	60 Hz	53.1 kHz			△ 1024x768	
1360x768	60 Hz	47.7 kHz			△ 1024x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1024x768	I/O DATA
1152x864	60 Hz	53.7 kHz		△ 768x768	△ 1024x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x900	66 Hz	61.8 kHz		△ 768x768	△ 1024x768	Work station (SUN)
	76 Hz	71.7 kHz		↑	↑	Work station (SUN)
1440x900	59.9 Hz	55.9 kHz			△ 1024x768	Apple Macintosh17"
1280x960	60 Hz	60.0 kHz		△ 768x768	△ 1024x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	64.0 kHz		△ 720x768	△ 1024x768	Work station (SGI)
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	75 Hz	80.0 kHz		↑	↑	
	85 Hz	91.1 kHz		↑	↑	
1400x1050	60 Hz	65.3 kHz		△ 768x768	△ 1024x768	
1680x1050	60 Hz	65.3 kHz			△ 1024x768	
1920x1080	50 Hz	56.2 kHz			△ 1024x768	
	60 Hz	67.5 kHz			↑	
1600x1200	60 Hz	75.0 kHz		△ 768x768	△ 1024x768	
1920x1200RB*	60 Hz	74.0 kHz			△ 1024x768	CVT

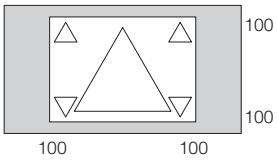
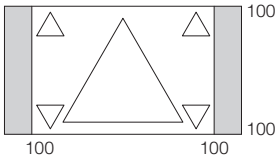
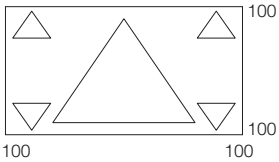
◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary.
○ : Picture will be enlarged but some fine detail will be hard to see.
△ : Simple reproduction. Fine detail will not be reproduced.
RB*: Abbreviation for Reduce Blanking that is set by CVT.

Note

In rare cases, the picture may not translate properly when switching between compatible signal formats on the output device (PC, etc.). Should this happen, turn off the power and then turn it back on again.

2) Screen size

Unit: % (percent)

Screen size	Personal computer signal	Remarks
DOT BY DOT The input signal corresponds 1:1 with the pixels of the Plasma Display for an accurate reproduction. PDP-427CMX: This unit is designed with horizontally oblong elements, with the result that the image displayed will appear more oblong than the original input signal.		This screen size exists for a personal computer signal when the input signals a less than the pixels of the plasma display. For details, refer to the correspondence signal table.
4:3 For a 4:3 source, roundness can be accurately reproduced (In order to prevent burning of the screen, this screen size should not be used unless required).		
FULL This is for wide-screen video (squeeze) (For a 16:9 source, roundness is nearly accurate).		

- The screen size settings are stored in memory for each function and for each input signal. Up to eight (8) sizes can be stored in memory for each function.

3) Input correspondence signals (video signals) ★ (Applicable only when a PDA-5003/PDA-5004 is installed.)

INPUT1, INPUT5 ★

: Not available.

Refresh rate		Signal format	Screen size						Remarks
Vertical fv (Hz)	Horizontal fH (kHz)		4:3	FULL	ZOOM	WIDE	14:9	2.35:1	
50	15.625	Component	○	○	○	○	○	○	625i (576i)/SDTV
		RGB	○	○	○	○	○	○	
	28.13	Component		○		○		○	1125i (1080i)/HDTV
		RGB		○		○		○	
	31.25	Component	○	○	○	○	○	○	625p (576p)/SDTV
		RGB	○	○	○	○	○	○	
	37.50	Component		○		○		○	750p (720p)/HDTV
		RGB		○		○		○	
	56.20	Component		○*1				○	1125p (1080p)/HDTV
		RGB		○*1				○	
	62.50	Component		○*1				○	1250p/HDTV
		RGB		○*1				○	
60	15.734	Component	○	○	○	○	○	○	525i (480i)/SDTV
		RGB	○	○	○	○	○	○	
	31.5	Component	○	○	○	○	○	○	525p (480p)/SDTV
		RGB		○	○	○	○	○	
	33.75	Component		○		○		○	1125i (1080i)/HDTV
		RGB		○		○		○	1125i (1035i)/HDTV
	45.0	Component		○		○		○	750p (720p)/HDTV
		RGB		○				○	
	67.5	Component		○*1				○	1125p (1080p)/HDTV
		RGB		○*1				○	

*1: Some visual distortion may occur depending on the combination of connected components.

INPUT2 ★

: Not available.

Vertical fv (Hz)	Horizontal fH (kHz)	Signal format	Screen size						Remarks
			4:3	FULL	ZOOM	WIDE	14:9	2.35:1	
50	28.13	RGB		○		○		○	1125i(1080i)/HDTV
	31.25	RGB	○	○	○	○	○	○	625p(576p)/SDTV
	37.50	RGB		○		○		○	750p(720p)/HDTV
60	31.5	RGB	○	○	○	○	○	○	525p(480p)/SDTV
	33.75	RGB		○		○		○	1125i(1080i)/HDTV
	45.0	RGB		○		○		○	750p(720p)/HDTV

The following signals are not formally supported but can be displayed (not recorded in EDID data).

Vertical fv (Hz)	Horizontal fH (kHz)	Signal format	Screen size						Remarks
			4:3	FULL	ZOOM	WIDE	14:9	2.35:1	
50	15.6	RGB	○	○	○	○	○	○	625i(576i)/SDTV
	56.25	RGB		○		○		○	1125p(1080p)/HDTV
	15.8	RGB	○	○	○	○	○	○	525i(480i)/SDTV
60	31.5	RGB	○	○	○	○	○	○	525p(480p)x640 dot/SDTV
	67.5	RGB		○		○		○	1125p(1080p)/HDTV
50	62.5	RGB		○		○		○	1250p/HDTV

*May not be displayed accurately depending on the connected device

INPUT3 ★

	Signal Format	Screen size							Remark
		4 : 3	FULL	ZOOM	WIDE	CINEMA	14:9	2.35:1	
NTSC	S-Video (Y/C)	O	O	O	O	O	O	O	
PAL	S-Video (Y/C)	O	O	O	O	O	O	O	
SECAM	S-Video (Y/C)	O	O	O	O	O	O	O	
4.43 NTSC	S-Video (Y/C)	O	O	O	O	O	O	O	
PAL M	S-Video (Y/C)	O	O	O	O	O	O	O	
PAL N	S-Video (Y/C)	O	O	O	O	O	O	O	

INPUT4 ★

	Signal Format	Screen size							Remark
		4 : 3	FULL	ZOOM	WIDE	CINEMA	14:9	2.35:1	
NTSC	Composite	O	O	O	O	O	O	O	
PAL	Composite	O	O	O	O	O	O	O	
SECAM	Composite	O	O	O	O	O	O	O	
4.43 NTSC	Composite	O	O	O	O	O	O	O	
PAL M	Composite	O	O	O	O	O	O	O	
PAL N	Composite	O	O	O	O	O	O	O	

- 'UNDERSCAN' is for display-screen sizes other than those given in the table above. This size can be set using 'PRO USE' in the integrator mode.

4) Input correspondence signals (personal computer signals)
INPUT1, INPUT5 ★ (Applicable only when a PDA-5003/PDA-5004 is installed.)
[PDP-507CMX]

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
640x400	70.1 Hz	31.5 kHz	◎ 640x400		○ 1365x768	NEC PC-9800
720x400	70.1 Hz	31.5 kHz	◎ 720x400		○ 1365x768	NEC PC-9800
	85.1 Hz	37.9 kHz	↑		↑	
640x480	59.9 Hz	31.5 kHz	◎ 640x480	○ 1024x768	○ 1365x768	
	66.7 Hz	35.0 kHz	↑	↑	↑	Apple Macintosh 13″
	72.8 Hz	37.9 kHz	↑	↑	↑	
	75 Hz	37.5 kHz	↑	↑	↑	
	85 Hz	43.3 kHz	↑	↑	↑	
	100.4 Hz	51.1 kHz	↑	↑	↑	I/O DATA
	120.4 Hz	61.3 kHz	↑	↑	↑	I/O DATA
848x480	60 Hz	31.0 kHz	◎ 848x480		○ 1365x768	
852x480	60 Hz	31.7 kHz	◎ 852x480		○ 1365x768	I/O DATA
800x600	56.3 Hz	35.2 kHz	◎ 800x600	○ 1024x768	○ 1365x768	
	60.3 Hz	37.9 kHz	↑	↑	↑	
	72.2 Hz	48.1 kHz	↑	↑	↑	
	75 Hz	46.9 kHz	↑	↑	↑	
	85.1 Hz	53.7 kHz	↑	↑	↑	
	99.8 Hz	63.0 kHz	↑	↑	↑	I/O DATA
	120 Hz	75.7 kHz	↑	↑	↑	I/O DATA
832x624	74.6 Hz	49.7 kHz	◎ 832x624	○ 1024x768	○ 1365x768	Apple Macintosh 16″
1024x768	60 Hz	48.4 kHz	◎ 1024x768		○ 1365x768	
	60 Hz	49.7 kHz	↑		↑	Work station (SGI)
	70.1 Hz	56.5 kHz	↑		↑	
	75 Hz (74.9 Hz)	60.0 kHz (60.2 kHz)	↑		↑	( ) indicates Apple Macintosh 19″
	85 Hz	68.7 kHz	↑		↑	
	100.6 Hz	80.5 kHz	↑		↑	I/O DATA
	119.4 Hz	95.5 kHz	↑		↑	
1280x768	56.2 Hz	45.1 kHz	◎ 1280x768		△ 1365x768	
	59.8 Hz	48 kH z	↑		↑	
	69.8 Hz	56 kH z	↑		↑	
1360x768	60 Hz	47.7 kHz	◎ 1360x768		△ 1365x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1365x768	I/O DATA
1280x800	59.8 Hz	49.7 kHz			△ 1365x768	CVT
1280x854	60 Hz	53.1 kHz			△ 1365x768	PC
1152x864	60 Hz	53.7 kHz		△ 1024x768	△ 1365x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x870	75.1 Hz	68.7 kHz		△ 1024x768	△ 1365x768	Apple Macintosh 21″
1152x900	66 Hz	61.8 kHz		△ 1024x768	△ 1365x768	Sun Microsystems LO
	76 Hz	71.7 kHz		↑	↑	Sun Microsystems HI

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1440x900	59.9 Hz	55.9 kHz			△ 1365x768	Apple Macintosh 17″
1280x960	60 Hz	60.0 kHz		△ 1024x768	△ 1365x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	63.9 kHz		△ 1024x768	△ 1365x768	Work station (SGI)
	60 Hz	64.0 kHz		↑	↑	
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	75 Hz	80.0 kHz		↑	↑	
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	85 Hz	91.1 kHz		↑	↑	
	100.1 Hz	108.5 kHz		↑	↑	I/O DATA
1400x1050	60 Hz	65.3 kHz		△ 1024x768	△ 1365x768	
	74.9 Hz	82.3 kHz		↑	↑	
	85 Hz	93.9 kHz		↑	↑	
1680x1050	60 Hz	65.3 kHz			△ 1365x768	
1600x1200	60 Hz	75.0 kHz		△ 1024x768	△ 1365x768	
	65 Hz	81.3 kHz		↑	↑	
	70 Hz	87.5 kHz		↑	↑	
	75 Hz	93.8 kHz		↑	↑	
	85 Hz	106.3 kHz		↑	↑	
1920x1200	59.9 Hz	74.6 kHz			△ 1365x768	CVT
1920x1200RB*	60 Hz	74.0 kHz			△ 1365x768	CVT

◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary
○ : Picture will be enlarged but some fine detail will be hard to see.
△ : Simple reproduction. Fine detail will not be reproduced.
RB*: Abbreviation for Reduce Blanking that is set by CVT.

INPUT2

[PDP-507CMX]

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
720x400	70.1 Hz	31.5 kHz	◎ 720x400		○ 1365x768	NEC PC-9800
	85.1 Hz	37.9 kHz	↑		↑	
640x480	59.9 Hz	31.5 kHz	◎ 640x480	○ 1024x768	○ 1365x768	
	72.8 Hz	37.9 kHz	↑	↑	↑	
	75 Hz	37.5 kHz	↑	↑	↑	
	85 Hz	43.3 kHz	↑	↑	↑	
	100.4 Hz	51.1 kHz	↑	↑	↑	
	120.4 Hz	61.3 kHz	↑	↑	↑	
848x480	60 Hz	31.0 kHz	◎ 848x480		○ 1365x768	
852x480	60 Hz	31.7 kHz	◎ 852x480		○ 1365x768	
800x600	56.3 Hz	35.2 kHz	◎ 800x600	○ 1024x768	○ 1365x768	
	60.3 Hz	37.9 kHz	↑	↑	↑	
	72.2 Hz	48.1 kHz	↑	↑	↑	
	75 Hz	46.9 kHz	↑	↑	↑	
	85.1 Hz	53.7 kHz	↑	↑	↑	
	99.8 Hz	63.0 kHz	↑	↑	↑	
	120 Hz	75.7 kHz	↑	↑	↑	

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1024x768	60 Hz	48.4 kHz	◎ 1024x768		○ 1365x768	
	60 Hz	49.7 kHz	↑		↑	Work station (SGI)
	70.1 Hz	56.5 kHz	↑		↑	
	75 Hz	60.0 kHz	↑		↑	
	85 Hz	68.7 kHz	↑		↑	
	100.6 Hz	80.5 kHz	↑		↑	
	119.4 Hz	95.5 kHz	↑		↑	
1280x768	56.2 Hz	45.1 kHz	◎ 1280x768		△ 1365x768	
	59.8 Hz	48 kH z	↑		↑	
	69.8 Hz	56 kH z	↑		↑	
1280x800	59.8 Hz	49.7 kHz			△ 1365x768	
1280x854	60 Hz	53.1 kHz			△ 1365x768	
1360x768	60 Hz	47.7 kHz	◎ 1360x768		△ 1365x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1365x768	I/O DATA
1152x864	60 Hz	53.7 kHz		△ 1024x768	△ 1365x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x900	66 Hz	61.8 kHz		△ 1024x768	△ 1365x768	Sun Microsystems LO
	76 Hz	71.7 kHz		↑	↑	Sun Microsystems HI
1440x900	59.9 Hz	55.9 kHz			△ 1365x768	Apple Macintosh17"
1280x960	60 Hz	60.0 kHz		△ 1024x768	△ 1365x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	63.9 kHz		△ 1024x768	△ 1365x768	Work station (SGI)
	60 Hz	64.0 kHz		↑	↑	
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	75 Hz	80.0 kHz		↑	↑	
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	85 Hz	91.1 kHz		↑	↑	
1400x1050	60 Hz	65.3 kHz		△ 1024x768	△ 1365x768	
	74.9 Hz	82.3 kHz		↑	↑	
1680x1050	60 Hz	65.3 kHz			△ 1365x768	
1920x1080	50 Hz	56.2 kHz			△ 1365x768	
	60 Hz	67.5 kHz			↑	
1600x1200	60 Hz	75.0 kHz		△ 1024x768	△ 1365x768	CVT
1920x1200RB*	60 Hz	74.0 kHz			△ 1365x768	

◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary.
○ : Picture will be enlarged but some fine detail will be hard to see.
△ : Simple reproduction. Fine detail will not be reproduced.
RB*: Abbreviation for Reduce Blanking that is set by CVT.

Note

In rare cases, the picture may not translate properly when switching between compatible signal formats on the output device (PC, etc.). Should this happen, turn off the power and then turn it back on again.

INPUT1

[PDP-427CMX]

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
640x400	70.1 Hz	31.5 kHz			○ 1024x768	NEC PC-9800
720x400	70.1 Hz	31.5 kHz			○ 1024x768	NEC PC-9800
	85.1 Hz	37.9 kHz			↑	
640x480	59.9 Hz	31.5 kHz		○ 768x768	○ 1024x768	
	66.7 Hz	35.0 kHz		↑	↑	Apple Macintosh 13"
	72.8 Hz	37.9 kHz		↑	↑	
	75 Hz	37.5 kHz		↑	↑	
	85 Hz	43.3 kHz		↑	↑	
	100.4 Hz	51.1 kHz		↑	↑	I/O DATA
	120.4 Hz	61.3 kHz		↑	↑	I/O DATA
848x480	60 Hz	31.0 kHz			○ 1024x768	
852x480	60 Hz	31.7 kHz			○ 1024x768	I/O DATA
800x600	56.3 Hz	35.2 kHz		○ 768x768	○ 1024x768	
	60.3 Hz	37.9 kHz		↑	↑	
	72.2 Hz	48.1 kHz		↑	↑	
	75 Hz	46.9 kHz		↑	↑	
	85.1 Hz	53.7 kHz		↑	↑	
	99.8 Hz	63.0 kHz		↑	↑	I/O DATA
	120 Hz	75.7 kHz		↑	↑	I/O DATA
832x624	74.6 Hz	49.7kHz		○ 768x768	○ 1024x768	Apple Macintosh 16"
1024x768	60 Hz	48.4 kHz	◎ 1024x768	○ 768x768		
	60 Hz	49.7 kHz	↑	↑		Work station (SGI)
	70.1 Hz	56.5 kHz	↑	↑		
	75 Hz (74.9 Hz)	60.0 kHz (60.2 kHz)	↑	↑		( ) indicates Apple Macintosh 19"
	85 Hz	68.7 kHz	↑	↑		
	100.6 Hz	80.5 kHz	↑	↑		I/O DATA
	119.4 Hz	95.5 kHz	↑	↑		
1280x768	56.2 Hz	45.1 kHz			△ 1024x768	
	59.8 Hz	48 kHz			↑	
	69.8 Hz	56 kHz			↑	
1360x768	60 Hz	47.7 kHz			△ 1024x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1024x768	I/O DATA
1280x800	59.8 Hz	49.7 kHz			△ 1024x768	CVT
1280x854	60 Hz	53.1 kHz			△ 1024x768	PC
1152x864	60 Hz	53.7 kHz		△ 768x768	△ 1024x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x870	75.1 Hz	68.7 kHz		△ 768x768	△ 1024x768	Apple Macintosh 21"
1152x900	66 Hz	61.8 kHz		△ 768x768	△ 1024x768	Sun Microsystems LO
	76 Hz	71.7 kHz		↑	↑	Sun Microsystems HI

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1440x900	59.9 Hz	55.9 kHz			△ 1024x768	Apple Macintosh 17"
1280x960	60 Hz	60.0 kHz		△ 768x768	△ 1024x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	64.0 kHz		△ 720x768	△ 1024x768	Work station (SGI)
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	75 Hz	80.0 kHz		↑	↑	
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	85 Hz	91.1 kHz		↑	↑	
	100.1 Hz	108.5 kHz		↑	↑	I/O DATA
1400x1050	60 Hz	65.3 kHz		△ 768x768	△ 1024x768	
	75 Hz	82.3 kHz		↑	↑	
	85 Hz	93.9 kHz		↑	↑	
1680x1050	60 Hz	65.3 kHz			△ 1024x768	
1600x1200	60 Hz	75.0 kHz		△ 768x768	△ 1024x768	
	65 Hz	81.3 kHz		↑	↑	
	70 Hz	87.5 kHz		↑	↑	
	75 Hz	93.8 kHz		↑	↑	
	85 Hz	106.3 kHz		↑	↑	
1920x1200	59.9 Hz	74.6 kHz			△ 1024x768	CVT
1920x1200RB*	60 Hz	74.0 kHz			△ 1024x768	CVT

◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary
○ : Picture will be enlarged but some fine detail will be hard to see.
△ : Simple reproduction. Fine detail will not be reproduced.
RB*: Abbreviation for Reduce Blanking that is set by CVT.

INPUT2

[PDP-427CMX]

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
640x480	59.9 Hz	31.5 kHz		○ 768x768	○ 1024x768	
	72.8 Hz	37.9 kHz		↑	↑	
	75 Hz	37.5 kHz		↑	↑	
	85 Hz	43.3 kHz		↑	↑	
	100.4 Hz	51.1 kHz		↑	↑	
	120.4 Hz	61.3 kHz		↑	↑	
720x400	70.1 Hz	31.5 kHz			○ 1024x768	NEC PC-9800
	85.1 Hz	37.9 kHz			↑	
848x480	60 Hz	31.0 kHz			○ 1024x768	
852x480	60 Hz	31.7 kHz			○ 1024x768	
800x600	56.3 Hz	35.2 kHz		○ 768x768	○ 1024x768	
	60.3 Hz	37.9 kHz		↑	↑	
	72.2 Hz	48.1 kHz		↑	↑	
	75 Hz	46.9 kHz		↑	↑	
	85.1 Hz	53.7 kHz		↑	↑	
	99.8 Hz	63.0 kHz		↑	↑	
	120 Hz	75.7 kHz		↑	↑	

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1024x768	60 Hz	48.4 kHz	◎ 1024x768	○ 768x768		
	60 Hz	49.7 kHz	↑	↑		Work station (SGI)
	70.1 Hz	56.5 kHz	↑	↑		
	75 Hz	60.0 kHz	↑	↑		
	85 Hz	68.7 kHz	↑	↑		
	100.6 Hz	80.5 kHz	↑	↑		
1280x768	56.2 Hz	45.1 kHz			△ 1024x768	
	59.8 Hz	48 kHz			↑	
	69.8 Hz	56 kHz			↑	
1280x800	59.8 Hz	49.7 kHz			△ 1024x768	
1280x854	60 Hz	53.1 kHz			△ 1024x768	
1360x768	60 Hz	47.7 kHz			△ 1024x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1024x768	I/O DATA
1152x864	60 Hz	53.7 kHz		△ 768x768	△ 1024x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x900	66 Hz	61.8 kHz		△ 768x768	△ 1024x768	Work station (SUN)
	76 Hz	71.7 kHz		↑	↑	Work station (SUN)
1440x900	59.9 Hz	55.9 kHz			△ 1024x768	Apple Macintosh17″
1280x960	60 Hz	60.0 kHz		△ 768x768	△ 1024x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	64.0 kHz		△ 720x768	△ 1024x768	Work station (SGI)
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	75 Hz	80.0 kHz		↑	↑	
	85 Hz	91.1 kHz		↑	↑	
1400x1050	60 Hz	65.3 kHz		△ 768x768	△ 1024x768	
1680x1050	60 Hz	65.3 kHz			△ 1024x768	
1920x1080	50 Hz	56.2 kHz			△ 1024x768	
	60 Hz	67.5 kHz			↑	
1600x1200	60 Hz	75.0 kHz		△ 768x768	△ 1024x768	
1920x1200RB*	60 Hz	74.0 kHz			△ 1024x768	CVT

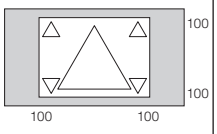
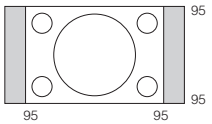
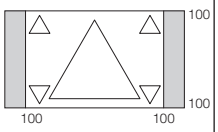
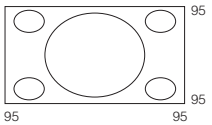
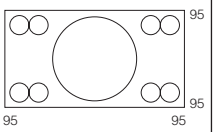
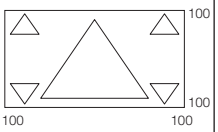
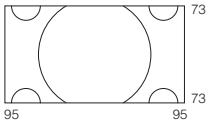
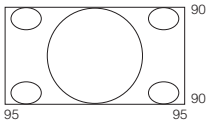
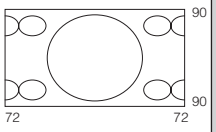
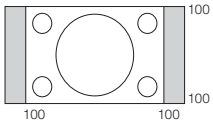
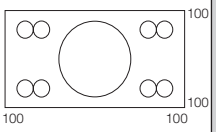
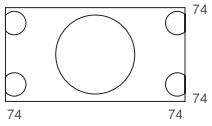
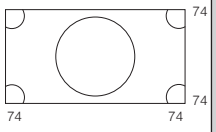
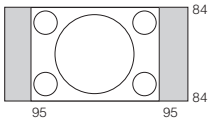
◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary.
○ : Picture will be enlarged but some fine detail will be hard to see.
△ : Simple reproduction. Fine detail will not be reproduced.
RB*: Abbreviation for Reduce Blanking that is set by CVT.

Note

In rare cases, the picture may not translate properly when switching between compatible signal formats on the output device (PC, etc.). Should this happen, turn off the power and then turn it back on again.

5) Screen size

Unit: % (percent)

Screen size	When a video card is installed		Personal computer signal	Remarks
	Video signal 4:3 source (NTSC, 625i, etc.)	Video signal 16:9 source (750p, 1080i, etc.)		
DOT BY DOT The input signal corresponds 1:1 with the pixels of the Plasma Display for an accurate reproduction. PDP-427CMX: This unit is designed with horizontally oblong elements, with the result that the image displayed will appear more oblong than the original input signal.				This screen size exists for a personal computer signal when the input signals a less than the pixels of the plasma display. For details, refer to the correspondence signal table.
4:3 For a 4:3 source, roundness can be accurately reproduced (In order to prevent burning of the screen, this screen size should not be used when possible).				
FULL This is for wide-screen video (squeeze) (For a 16:9 source, roundness is nearly accurate).				
ZOOM For a video signal, this is for a cinesco (cinema scope) size video.				
WIDE This is for reproducing the 4:3 portion of a 4:3 source or 16:9 source on the entire screen (roundness near the center is nearly accurate).				
UNDERSCAN This is used by a broadcast station and the like for viewing the portion outside the normal effective display range.				When selecting the underscan by switching the screen size, please set to UNDERSCAN: ON using PRO USE of the integrator mode.
2.35:1 Displays 2.35:1 squeezed image full-screen without black border. However, portions of image at right and left edges are cut.				
14:9 Displays expanded 4:3 screen image without distortion.				

- The screen size settings are stored in memory for each function and for each input signal. Up to eight (8) sizes can be stored in memory for each function.

5.1.4 List of Adjustable and Settable Items

1) Menu Mode

■ **PDP-507CMX/PDP-427CMX**

			Variable range (STEP)	Integrator coefficient (/STEP)	Factory setting	PDP-507CMX/PDP-427CMX	
						INPUT1	INPUT2
						PC signal	PC signal
						Analog RGB	Digital RGB
PICTURE	CONTRAST		-30 to +30	X3[*1], X4[*2]	0	○	○
	BRIGHTNESS		-30 to +30	X1	0	○	○
	H. ENHANCE		0 to +15	X1	0	○	○
	V. ENHANCE		0 to +15	X1	0	○	○
	COLOR		-30 to +30	X1	0		
	TINT		-30 to +30	X1	0		
	SHARPNESS		-7 to +7	X1	0		
SCREEN	POSITION	H	-128 to +127 (for a PC signa) -64 to +63 (for a video signa)	X1	0	○	○
		V	-128 to +127 (for a PC signa) -64 to +63 (for a video signa)	X1	0	○	○
	CLOCK		-128 to +127	X1	0	○	
	PHASE		-16 to +15	X1	0	○	
SETUP	COLOR TEMP.		LOW-MID LOW-MIDDLE-MID HIGH-HIGH		MIDDLE		
	POWER MGT.		OFF-ON		OFF	○	○
	AUTO POWER OFF		DISABLE-ENABLE		DISABLE		
	DNR		OFF-LOW-MIDDLE-HIGH		MIDDLE		
	MPEG NR		OFF-LOW-MIDDLE-HIGH		LOW		
	CTI		OFF-ON		ON		
	PURECINEMA		OFF-ON		ON		
	COLOR DECODING		RGB-COMP.1-COMP.2		COMP.1/2		
	COLOR SYSTEM		AUTO-NTSC-4.43NTSC-PAL-PAL N-PAL M-SECAM		AUTO		
	SIGNAL FORMAT		AUTO		AUTO	○	○
	DVI SET UP	PLUG/PLAY	PC		PC		○
		BLACK LEVEL	LOW-HIGH		LOW		○
OPTION (NOTE 1)	LANGUAGE		ENGLISH-FRANÇAIS-ESPAÑOL-DEUTSCH-ITALIANO-日本語		ENGLISH	○	
	ENERGY SAVE		PDP-507CMX: STANDARD1-STANDARD2-AUTO-MODE1-MODE2-MODE3-MUTE		STANDARD1	○	
			PDP-427CMX: STANDARD-AUTO-MODE1-MODE2-MODE3-MUTE		STANDARD		
	TIMER SETTING	PRESENT TIME	Hour: Disply for 24 hours Day: SUNDAY-MONDAY-TUESDAY-WEDNESDAY-THURSDAY-FRIDAY-SATURDAY		-	○	
		DAYLIGHT SAVIG TIME	ON-OFF		OFF	○	
		PROGRAM / REPEAT TIMER	OFF-PROGRAM-REPEAT		OFF	○	
	SCREEN MGT.	ORBITER	OFF-MODE1-MODE2-MODE3		OFF	○	
		SOFT FOCUS	OFF-1 to 4		OFF	○	
	AUTO SETUP MODE		INACTIVE-ACTIVE		INACTIVE	○	
	AUTO FUNCTION		OFF-INPUT1		OFF	○	
	PIP DETECT		ACTIVE-INACTIVE		ACTIVE	○	
	SPLIT FREEZE		OFF-S BY S-PIP		OFF	○	

*1: INPUT1 case

*2: INPUT2 case

(Note 1) The OPTION settings are common settings for all inputs.

■ PDP-507CMX/PDP-427CMX★

			Variable range (STEP)	Integrator coefficient (/STEP)	Factory setting	PDP-507CMX/PDP-427CMX			
						INPUT1		INPUT2	
						PC signal	Video signal★	PC signal	Video signal★
						Analog RGB	Component RGB	Digital RGB	Digital HDCP
PICTURE	CONTRAST		-30 to +30	X3[*1], X4[*2]	0	○	○	○	○
	BRIGHTNESS		-30 to +30	X1	0	○	○	○	○
	H. ENHANCE		0 to +15	X1	0	○		○	
	V. ENHANCE		0 to +15	X1	0	○		○	
	COLOR		-30 to +30	X1	0		○		○
	TINT		-30 to +30	X1	0		○		○
	SHARPNESS		-7 to +7	X1	0		○		○
SCREEN	POSITION	H	-128 to +127 (for a PC signa) -64 to +63 (for a video signa)	X1	0	○	○	○	○
		V	-128 to +127 (for a PC signa) -64 to +63 (for a video signa)	X1	0	○	○	○	○
	CLOCK		-128 to +127	X1	0	○			
	PHASE		-16 to +15	X1	0	○			
SETUP	COLOR TEMP.		LOW-MID LOW-MIDDLE-MID HIGH-HIGH		MIDDLE		○		○
	POWER MGT.		OFF-ON		OFF	○		○	
	AUTO POWER OFF		DISABLE-ENABLE		DISABLE		○		○
	DNR		OFF-LOW-MIDDLE-HIGH		MIDDLE		△		△
	MPEG NR		OFF-LOW-MIDDLE-HIGH		LOW		○		○
	CTI		OFF-ON		ON		○		○
	PURECINEMA		OFF-ON		ON		△		△
	COLOR DECODING		RGB-COMP.1-COMP.2		COMP.1/2		○		○
	COLOR SYSTEM		AUTO-NTSC-4.43NTSC-PAL-PAL N-PAL M-SECAM		AUTO				
	SIGNAL FORMAT		AUTO		AUTO	○	○	○	
	DVI SET UP	PLUG/PLAY	PC-VIDEO★		PC			○	○
		BLACK LEVEL	LOW-HIGH		LOW			○	○
OPTION (NOTE 1)	LANGUAGE		ENGLISH-FRANÇAIS-ESPAÑOL-DEUTSCH-ITALIANO-日本語		ENGLISH	○			
	ENERGY SAVE		PDP-507CMX: STANDARD1-STANDARD2-AUTO-MODE1-MODE2-MODE3-MUTE		STANDARD1	○			
			PDP-427CMX: STANDARD-AUTO-MODE1-MODE2-MODE3-MUTE		STANDARD				
	TIMER SETTING	PRESENT TIME	Hour: Disply for 24 hours Day: SUNDAY-MONDAY-TUESDAY-WEDNESDAY-THURSDAY-FRIDAY-SATURDAY		-	○			
		DAYLIGHT SAVIG TIME	ON-OFF		OFF	○			
		PROGRAM / REPEAT TIMER	OFF-PROGRAM-REPEAT		OFF	○			
	SCREEN MGT.	ORBITER	OFF-MODE1-MODE2-MODE3		OFF	○			
		SOFT FOCUS	OFF-1 to 4		OFF	○			
	AUTO SETUP MODE		INACTIVE-ACTIVE		INACTIVE	○			
	AUTO FUNCTION		OFF-INPUT1-INPUT4★		OFF	○			
	PIP DETECT		ACTIVE-INACTIVE		ACTIVE	○			
	SPLIT FREEZE		OFF-S BY S-PIP		OFF	○			

★: Applicable only when a PDA-5003/PDA-5004 is installed.
△: Cannot be set according to the signal.
*1: INPUT1 case
*2: INPUT2 case
(Note 1) The OPTION settings are common settings for all inputs.

■ PDA-5003/PDA-5004

			Variable range (STEP)	Integrator coefficient (/STEP)	Factory setting	PDA-5003/PDA-5004					
						INPUT3	INPUT4	INPUT5 (when PDA-5003 is mounted)		INPUT5 (when PDA-5004 is mounted)	
						Video signal	Video signal	PC signal	Video signal	PC signal	Video signal
						S-Video	Compsite	Analog RGB	Component RGB	Analog RGB	Component RGB
PICTURE	CONTRAST		-30 to +30	X3[*1], X4[*2]	0	○	○	○	○	○	○
	BRIGHTNESS		-30 to +30	X1	0	○	○	○	○	○	○
	H. ENHANCE		0 to +15	X1	0			○		○	
	V. ENHANCE		0 to +15	X1	0			○		○	
	COLOR		-30 to +30	X1	0	○	○		○		○
	TINT		-30 to +30	X1	0	○	○		○		○
	SHARPNESS		-7 to +7	X1	0	○	○		○		○
SCREEN	POSITION	H	-128 to +127 (for a PC signa) -64 to +63 (for a video signa)	X1	0	○	○	○	○	○	○
		V	-128 to +127 (for a PC signa) -64 to +63 (for a video signa)	X1	0	○	○	○	○	○	○
	CLOCK		-128 to +127	X1	0			○		○	
	PHASE		-16 to +15	X1	0			○		○	
SETUP	COLOR TEMP.		LOW-MID LOW-MIDDLE-MID HIGH-HIGH		MIDDLE	○	○		○		○
	POWER MGT.		OFF-ON		OFF			○			
	AUTO POWER OFF		DISABLE-ENABLE		DISABLE	○	○		○	○	○
	DNR		OFF-LOW-MIDDLE-HIGH		MIDDLE	△	△		△		○
	MPEG NR		OFF-LOW-MIDDLE-HIGH		LOW	○	○		○		○
	CTI		OFF-ON		ON	○	○		○		○
	PURECINEMA		OFF-ON		ON	△	△		△		△
	COLOR DECODING		RGB-COMP.1-COMP.2		COMP.1/2				○		○
	COLOR SYSTEM		AUTO-NTSC-4.43NTSC-PAL-PAL N-PAL M-SECAM		AUTO	○	○				
	SIGNAL FORMAT		AUTO		AUTO			○	○	○	○
OPTION (NOTE 1)	LANGUAGE		ENGLISH-FRANÇAIS-ESPAÑOL-DEUTSCH-ITALIANO-日本語		ENGLISH	○					
	ENERGY SAVE		PDP-507CMX: STANDARD1-STANDARD2-AUTO-MODE1-MODE2-MODE3-MUTE		STANDARD1	○					
			PDP-427CMX: STANDARD-AUTO-MODE1-MODE2-MODE3-MUTE		STANDARD						
	TIMER SETTING	PRESENT TIME	Hour: Disply for 24 hours Day: SUNDAY-MONDAY-TUESDAY-WEDNESDAY-THURSDAY-FRIDAY-SATURDAY		-	○					
		DAYLIGHT SAVIG TIME	ON-OFF		OFF	○					
		PROGRAM/ REPEAT TIMER	OFF-PROGRAM-REPEAT		OFF	○					
	SCREEN MGT.	ORBITER	OFF-MODE1-MODE2-MODE3		OFF	○					
		SOFT FOCUS	OFF-1 to 4		OFF	○					
	AUTO SETUP MODE		INACTIVE-ACTIVE		INACTIVE	○					
	AUTO FUNCTION		OFF-INPUT1-INPUT4★		OFF	○					
	PIP DETECT		ACTIVE-INACTIVE		ACTIVE	○					
	SPLIT FREEZE		OFF-S BY S-PIP		OFF	○					

★: Applicable only when a PDA-5003/PDA-5004 is installed.

△: Cannot be set according to the signal.

*1: INPUT5 case

*2: INPUT3 or INPUT4 cases

(Note 1) The OPTION settings are common settings for all inputs.

■ Slot card other than PDA-5003/PDA-5004

			Variable range (STEP)	Integrator coefficient (/STEP)	Factory setting	Slot card other than PDA-5003/PDA-5004			
						INPUT3 to 5		INPUT3 to 5	
						Video signal		PC signal	
						Analog	Digital	Analog	Digital
PICTURE	CONTRAST		-30 to +30	X3*1, X4*2	0	○	○	○	○
	BRIGHTNESS		-30 to +30	X1	0	○	○	○	○
	H. ENHANCE		0 to +15	X1	0			○	○
	V. ENHANCE		0 to +15	X1	0			○	○
	COLOR		-30 to +30	X1	0	○	○		
	TINT		-30 to +30	X1	0	○	○		
	SHARPNESS		-7 to +7	X1	0	○	○		
SCREEN	POSITION	H	-128 to +127 (for a PC signa) -64 to +63 (for a video signa)	X1	0	○	○	○	○
		V	-128 to +127 (for a PC signa) -64 to +63 (for a video signa)	X1	0	○	○	○	○
	CLOCK		-128 to +127	X1	0			○	
	PHASE		-16 to +15	X1	0			○	
SETUP	COLOR TEMP.		LOW-MID LOW-MIDDLE-MID HIGH-HIGH		MIDDLE	○	○		
	POWER MGT.		OFF-ON		OFF				
	AUTO POWER OFF		DISABLE-ENABLE		DISABLE	○	○	○	○
	DNR		OFF-LOW-MIDDLE-HIGH		MIDDLE	△	△		
	MPEG NR		OFF-LOW-MIDDLE-HIGH		LOW	○	○		
	CTI		OFF-ON		ON	○	○		
	PURECINEMA		OFF-ON		ON	△	△		
	COLOR DECODING		RGB-COMP.1-COMP.2		COMP.1/2	○	○		
	COLOR SYSTEM		AUTO-NTSC-4.43NTSC-PAL-PAL N-PAL M-SECAM		AUTO				
	SIGNAL FORMAT		AUTO		AUTO	○	○	○	○
	DVI SET UP	PLUG/PLAY	PC-VIDEO★		PC				
		BLACK LEVEL	LOW-HIGH		LOW				
OPTION (NOTE 1)	LANGUAGE		ENGLISH-FRANÇAIS-ESPAÑOL-DEUTSCH-ITALIANO-日本語		ENGLISH	○			
	ENERGY SAVE		PDP-507CMX: STANDARD1-STANDARD2-AUTO-MODE1-MODE2-MODE3-MUTE		STANDARD1	○			
			PDP-427CMX: STANDARD-AUTO-MODE1-MODE2-MODE3-MUTE		STANDARD				
	TIMER SETTING	PRESENT TIME	Hour: Disply for 24 hours Day: SUNDAY-MONDAY-TUESDAY-WEDNESDAY-THURSDAY-FRIDAY-SATURDAY		-	○			
		DAYLIGHT SAVIG TIME	ON-OFF		OFF	○			
		PROGRAM/ REPEAT TIMER	OFF-PROGRAM-REPEAT		OFF	○			
	SCREEN MGT.	ORBITER	OFF-MODE1-MODE2-MODE3		OFF	○			
		SOFT FOCUS	OFF-1 to 4		OFF	○			
	AUTO SETUP MODE		INACTIVE-ACTIVE		INACTIVE	○			
	AUTO FUNCTION		OFF-INPUT1-INPUT4★		OFF	○			
	PIP DETECT		ACTIVE-INACTIVE		ACTIVE	○			
	SPLIT FREEZE		OFF-S BY S-PIP		OFF	○			

★: Applicable only when a video card is installed.
△: Cannot be set according to the signal.
*1: INPUT3 to INPUT5 analog signal cases
*2: INPUT3 to INPUT5 digital signal cases
(Note 1) The OPTION settings are common settings for all inputs.

2) Integrator mode

■ PDP-507CMX/PDP-427CMX

			Variable range (STEP)	Factory setting	PDP-507CMX/PDP-427CMX	
					INPUT1	INPUT2
					PC signal	PC signal
					Analog RGB	Digital RGB
PICTURE	CONTRAST		0 to +255	+128	○	○
	BRIGHTNESS		0 to +255	+128	○	○
	H.ENHANCE		0 to +15	0	○	○
	V.ENHANCE		0 to +15	0	○	○
	COLOR		0 to +127	+64		
	TINT		0 to +60	+30		
	SHARPNESS		0 to +15	+8		
	WHITE BALANCE	R.HIGH	0 to +255	+128	○	○
		G.HIGH	0 to +255	+128	○	○
		B.HIGH	0 to +255	+128	○	○
		R.LOW	0 to +255	+128	○	○
		G.LOW	0 to +255	+128	○	○
		B.LOW	0 to +255	+128	○	○
	COLOR DETAIL	RED	0 to +60	+30	○	○
		YELLOW	0 to +60	+30	○	○
		GREEN	0 to +60	+30	○	○
		CYAN	0 to +60	+30	○	○
		BLUE	0 to +60	+30	○	○
		MAGENTA	0 to +60	+30	○	○
		C.DETAIL RESET	–	NO	○	○
	GAMMA		1.8 to 2.4	2.2	○	○
SCREEN	H.POSITION		0 to +255 (for PC signal) 0 to +127 (for video signal)	+128 (for PC signal) +64 (for video signal)	○	○
	V.POSITION		0 to +255 (for PC signal) 0 to +127 (for video signal)	+128 (for PC signal) +64 (for video signal)	○	○
	CLOCK		0 to +255	+128	○	
	PHASE		0 to +31	+16	○	
	H.SIZE		0 to +63	0	○	○
	V.SIZE		0 to +63	0	○	○
SETUP	BRT.ENHANCE		OFF-ON	OFF	○	
	SUB VOLUME		0 to 20	20	○	
OPTION (Page 1)	PROGRAM TIMER		Refer to pg. 223	Refer to pg. 223	○	
	SCREEN MASK		OFF-INVERSE-WHITE-RED-GREEN-BLUE-YELLOW	OFF	○	
	SIDE MASK	R.LEVEL	0 to +255	+80	○	
		G.LEVEL	0 to +255	+80	○	
		B.LEVEL	0 to +255	+80	○	
		AUTO SIDE MASK	OFF-ON	OFF	○	
	VIDEO WALL	DIVIDER	OFF-1-2x2-3x3-4x4-5x5	OFF	○	
		POSITION	Refer to pg. 229	Refer to pg. 229	○	
		TYPE	NORMAL-ADJUSTED	NORMAL	○	
		AUTO ID	ON-OFF	OFF	○	
		P.ON DELAY	OFF-ON-MODE1-MODE2	OFF	○	
		ABL LINK	ON-OFF	OFF	○	
	BAUD RATE		9600BPS-19200BPS-38400BPS-1200BPS-2400BPS-4800BPS	9600BPS	○	
	ID NO.SET		ALL-01H to FFH	ALL	○	
OPTION (Page 2)	FAN CONTROL		AUTO-MAX	AUTO	○	
	OSD	DISPLAY	ON-OFF	ON	○	
		SIZE	LARGE-SMALL	LARGE	○	
		ANGLE	H-V	H	○	
	FRONT INDICATOR		ON-OFF	ON	○	
	COLOR MODE		NORMAL-STUDIO	NORMAL	○	
	PRO USE	UNDERSCAN	ON-OFF	OFF	○	
		IMAGE PROCESS	NORMAL-PURE-MONO TONE-BLUE ONLY-HIGH CNT	NORMAL	○	
		SIGNAL TYPE	MOTION-STILL-NON-STD	MOTION	○	
	FRC		ON-OFF	ON	○	
OPTION (Page 3)	PWR.ON MODE	INPUT	LAST-INPUT1-INPUT2-MULTI	LAST	○	
		VOLUME	LAST-0-42	LAST	○	
	SEAMLESS SW	SEAMLESS SW	ON-OFF	OFF	○	
		SELECT1	INPUT1-INPUT2	INPUT1	○	
		SELECT2	INPUT1-INPUT2	INPUT2	○	
	MIRROR MODE		OFF-X-Y-XY	OFF	○	
	MULTISCREEN SET	S BY S SIZE	NORMAL-FULL	NORMAL	○	
		S BY S LAYOUT	MODE 1-MODE 2-MODE 3	MODE1	○	
		PIP SIZE	1-4	2	○	
		FADE PIP	OFF-ON	OFF	○	
		TRANSLUCENT PIP	80%-70%-60%-50%-40%-30%-20%-10%-OFF	OFF	○	
		BANNER PIP	OFF-BOTTOM1-BOTTOM2-BOTTOM3-MID LOW-MID-HIGH-TOP3-TOP2-TOP1-LEFT-RIGHT	OFF	○	
		BANNER INPUT	INPUT1-INPUT2	INPUT1	○	
	REPEAT TIMER		Refer to pg. 253	Refer to pg. 253	○	

(Note) The OPTION settings are common settings for all inputs.

■ PDP-507CMX/PDP-427CMX★

			Variable range (STEP)	Factory setting	PDP-507CMX/PDP-427CMX			
					INPUT1		INPUT2	
					PC signal	Video signal★	PC signal	Video signal★
					Analog RGB	Component RGB	Digital RGB	Digital HDCP
PICTURE	CONTRAST		0 to +255	+128	○	○	○	○
	BRIGHTNESS		0 to +255	+128	○	○	○	○
	H.ENHANCE		0 to +15	0	○		○	
	V.ENHANCE		0 to +15	0	○		○	
	COLOR		0 to +127	+64		○		○
	TINT		0 to +60	+30		○		○
	SHARPNESS		0 to +15	+8		○		○
	WHITE BALANCE	R.HIGH	0 to +255	+128	○	○	○	○
		G.HIGH	0 to +255	+128	○	○	○	○
		B.HIGH	0 to +255	+128	○	○	○	○
		R.LOW	0 to +255	+128	○	○	○	○
		G.LOW	0 to +255	+128	○	○	○	○
		B.LOW	0 to +255	+128	○	○	○	○
	COLOR DETAIL	RED	0 to +60	+30	○	○	○	○
		YELLOW	0 to +60	+30	○	○	○	○
		GREEN	0 to +60	+30	○	○	○	○
		CYAN	0 to +60	+30	○	○	○	○
		BLUE	0 to +60	+30	○	○	○	○
		MAGENTA	0 to +60	+30	○	○	○	○
		C.DETAIL RESET	–	NO	○	○	○	○
	GAMMA		1.8 to 2.4	2.2		○		○
SCREEN	H.POSITION		0 to +255 (for PC signal) 0 to +127 (for video signal)	+128 (for PC signal) +64 (for video signal)	○	○	○	○
	V.POSITION		0 to +255 (for PC signal) 0 to +127 (for video signal)	+128 (for PC signal) +64 (for video signal)	○	○	○	○
	CLOCK		0 to +255	+128	○			
	PHASE		0 to +31	+16	○			
	H.SIZE		0 to +63	0	○	○	○	○
	V.SIZE		0 to +63	0	○	○	○	○
SETUP	BRT.ENHANCE		OFF-ON	OFF		○		○
	SUB VOLUME		0 to 20	20		○		○
OPTION (Page 1)	PROGRAM TIMER		Refer to pg. 223	Refer to pg. 223		○		○
	SCREEN MASK		OFF-INVERSE-WHITE-RED-GREEN-BLUE-YELLOW	OFF	○			
	SIDE MASK	R.LEVEL	0 to +255	+80	○			
		G.LEVEL	0 to +255	+80	○			
		B.LEVEL	0 to +255	+80	○			
		AUTO SIDE MASK	OFF-ON	OFF	○			
	VIDEO WALL	DIVIDER	OFF-1-2x2-3x3-4x4-5x5	OFF	○			
		POSITION	Refer to pg. 229	Refer to pg. 229	○			
		TYPE	NORMAL-ADJUSTED	NORMAL	○			
		AUTO ID	ON-OFF	OFF	○			
		P.ON DELAY	OFF-ON-MODE1-MODE2	OFF	○			
		ABL LINK	ON-OFF	OFF	○			
	BAUD RATE		9600BPS-19200BPS-38400BPS-1200BPS-2400BPS-4800BPS	9600BPS	○			
	ID NO.SET		ALL-01H to FFH	ALL	○			
OPTION (Page 2)	FAN CONTROL		AUTO-MAX	AUTO	○			
	OSD	DISPLAY	ON-OFF	ON	○			
		SIZE	LARGE-SMALL	LARGE	○			
		ANGLE	H-V	H	○			
	FRONT INDICATOR		ON-OFF	ON	○			
	COLOR MODE		NORMAL-STUDIO	NORMAL	○			
	PRO USE	UNDERSCAN	ON-OFF	OFF	○			
		IMAGE PROCESS	NORMAL-PURE-MONO TONE-BLUE ONLY-HIGH CNT	NORMAL	○			
		SIGNAL TYPE	MOTION-STILL-NON-STD	MOTION	○			
	FRC		ON-OFF	ON	○			
OPTION (Page 3)	PWR.ON MODE	INPUT	LAST-INPUT1-INPUT2-INPUT3-INPUT4-INPUT5-MULTI★	LAST	○			
		VOLUME	LAST-0-42	LAST	○			
	SEAMLESS SW	SEAMLESS SW	ON-OFF	OFF	○			
		SELECT1	INPUT1-INPUT2-INPUT3-INPUT4-INPUT5★	INPUT1	○			
		SELECT2	INPUT1-INPUT2-INPUT3-INPUT4-INPUT5★	INPUT2	○			
	MIRROR MODE		OFF-X-Y-XY	OFF	○			
	MULTISCREEN SET	S BY S SIZE	NORMAL-FULL	NORMAL	○			
		S BY S LAYOUT	MODE 1-MODE 2-MODE 3	MODE1	○			
		PIP SIZE	1-4	2	○			
		FADE PIP	OFF-ON	OFF	○			
		TRANSLUCENT PIP	80%-70%-60%-50%-40%-30%-20%-10%-OFF	OFF	○			
		BANNER PIP	OFF-BOTTOM1-BOTTOM2-BOTTOM3-MID LOW-MID-HIGH-TOP3-TOP2-TOP1-LEFT-RIGHT	OFF	○			
		BANNER INPUT	INPUT1-INPUT2	INPUT1	○			
	REPEAT TIMER		Refer to pg. 253	Refer to pg. 253	○			

★: Applicable only when a PDA-5003/PDA-5004 is installed.

(Note) The OPTION settings are common settings for all inputs.

■ PDA-5003/PDA-5004

			Variable range (STEP)	Factory setting	PDA-5003/PDA-5004					
					INPUT3	INPUT4	INPUT5 (When PDA-5003 is mounted)		INPUT5 (When PDA-5004 is mounted)	
					Video signal	Video signal	PC signal	Video signal	PC signal	Video signal
					S video	Composite	Analog RGB	Component RGB	Analog RGB	Component RGB
PICTURE	CONTRAST		0 to +255	+128	○	○	○	○	○	○
	BRIGHTNESS		0 to +255	+128	○	○	○	○	○	○
	H.ENHANCE		0 to +15	0			○		○	
	V.ENHANCE		0 to +15	0			○		○	
	COLOR		0 to +127	+64	○	○		○		○
	TINT		0 to +60	+30	○	○		○		○
	SHARPNESS		0 to +15	+8	○	○		○		○
	WHITE BALANCE	R.HIGH	0 to +255	+128	○	○	○	○	○	○
		G.HIGH	0 to +255	+128	○	○	○	○	○	○
		B.HIGH	0 to +255	+128	○	○	○	○	○	○
		R.LOW	0 to +255	+128	○	○	○	○	○	○
		G.LOW	0 to +255	+128	○	○	○	○	○	○
		B.LOW	0 to +255	+128	○	○	○	○	○	○
	COLOR DETAIL	RED	0 to +60	+30	○	○	○	○	○	○
		YELLOW	0 to +60	+30	○	○	○	○	○	○
		GREEN	0 to +60	+30	○	○	○	○	○	○
		CYAN	0 to +60	+30	○	○	○	○	○	○
		BLUE	0 to +60	+30	○	○	○	○	○	○
		MAGENTA	0 to +60	+30	○	○	○	○	○	○
		C.DETAIL RESET	–	NO	○	○	○	○	○	○
	GAMMA		1.8 to 2.4	2.2	○					
SCREEN	H.POSITION		0 to +255 (for PC signal) 0 to +127 (for video signal)	+128 (for PC signal) +64 (for video signal)	○	○	○	○	○	○
	V.POSITION		0 to +255 (for PC signal) 0 to +127 (for video signal)	+128 (for PC signal) +64 (for video signal)	○	○	○	○	○	○
	CLOCK		0 to +255	+128			○		○	
	PHASE		0 to +31	+16			○		○	
	H.SIZE		0 to +63	0	○	○	○	○	○	○
	V.SIZE		0 to +63	0	○	○	○	○	○	○
SETUP	BRT.ENHANCE		OFF-ON	OFF	○					
	SUB VOLUME		0 to 20	20	○					
OPTION (Page 1)	PROGRAM TIMER		Refer to pg. 223	Refer to pg. 223	○					
	SCREEN MASK		OFF-INVERSE-WHITE-RED-GREEN-BLUE-YELLOW	OFF	○					
	SIDE MASK	R.LEVEL	0 to +255	+80	○					
		G.LEVEL	0 to +255	+80	○					
		B.LEVEL	0 to +255	+80	○					
		AUTO SIDE MASK	OFF-ON	OFF	○					
	VIDEO WALL	DIVIDER	OFF-1-2x2-3x3-4x4-5x5	OFF	○					
		POSITION	Refer to pg. 229	Refer to pg. 229	○					
		TYPE	NORMAL-ADJUSTED	NORMAL	○					
		AUTO ID	ON-OFF	OFF	○					
		P.ON DELAY	OFF-ON-MODE1-MODE2	OFF	○					
		ABL LINK	ON-OFF	OFF	○					
	BAUD RATE		9600BPS-19200BPS-38400BPS-1200BPS-2400BPS-4800BPS	9600BPS	○					
	ID NO.SET		ALL-01H to FFH	ALL	○					
OPTION (Page 2)	FAN CONTROL		AUTO-MAX	AUTO	○					
	OSD	DISPLAY	ON-OFF	ON	○					
		SIZE	LARGE-SMALL	LARGE	○					
		ANGLE	H-V	H	○					
	FRONT INDICATOR		ON-OFF	ON	○					
	COLOR MODE		NORMAL-STUDIO	NORMAL	○					
	PRO USE	UNDERSCAN	ON-OFF	OFF	○					
		IMAGE PROCESS	NORMAL-PURE-MONO TONE-BLUE ONLY-HIGH CNT	NORMAL	○					
		SIGNAL TYPE	MOTION-STILL-NON-STD	MOTION	○					
	FRC		ON-OFF	ON	○					
OPTION (Page 3)	PWR.ON MODE	INPUT	LAST-INPUT1-INPUT2-INPUT3-INPUT4-INPUT5-MULTI★	LAST	○					
		VOLUME	LAST-0-42	LAST	○					
	SEAMLESS SW	SEAMLESS SW	ON-OFF	OFF	○					
		SELECT1	INPUT1-INPUT2-INPUT3-INPUT4-INPUT5★	INPUT1	○					
		SELECT2	INPUT1-INPUT2-INPUT3-INPUT4-INPUT5★	INPUT2	○					
	MIRROR MODE		OFF-X-Y-XY	OFF	○					
	MULTISCREEN SET	S BY S SIZE	NORMAL-FULL	NORMAL	○					
		S BY S LAYOUT	MODE 1-MODE 2-MODE 3	MODE 1	○					
		PIP SIZE	1-4	2	○					
		FADE PIP	OFF-ON	OFF	○					
		TRANSLUCENT PIP	80%-70%-60%-50%-40%-30%-20%-10%-OFF	OFF	○					
		BANNER PIP	OFF-BOTTOM1-BOTTOM2-BOTTOM3-MID LOW-MID-HIGH-TOP3-TOP2-TOP1-LEFT-RIGHT	OFF	○					
		BANNER INPUT	INPUT1-INPUT2	INPUT1	○					
	REPEAT TIMER		Refer to pg. 253	Refer to pg. 253	○					

★: INPUT3 to INPUT5 are applicable only when the PDA-5003 or the PDA-5004 is installed.

(Note) The OPTION settings are common settings for all inputs.

■ Slot card other than PDA-5003/PDA-5004

			Variable range (STEP)	Factory setting	Slot card other than PDA-5003/PDA-5004			
					INPUT3 to 5		INPUT3 to 5	
					Video signal		PC signal	
					Analog	Digital	Analog	Digital
PICTURE	CONTRAST		0 to +255	+128	○	○	○	○
	BRIGHTNESS		0 to +255	+128	○	○	○	○
	H.ENHANCE		0 to +15	0			○	○
	V.ENHANCE		0 to +15	0			○	○
	COLOR		0 to +127	+64	○	○		
	TINT		0 to +60	+30	○	○		
	SHARPNESS		0 to +15	+8	○	○		
	WHITE BALANCE	R.HIGH	0 to +255	+128	○	○	○	○
		G.HIGH	0 to +255	+128	○	○	○	○
		B.HIGH	0 to +255	+128	○	○	○	○
		R.LOW	0 to +255	+128	○	○	○	○
		G.LOW	0 to +255	+128	○	○	○	○
		B.LOW	0 to +255	+128	○	○	○	○
	COLOR DETAIL	RED	0 to +60	+30	○	○	○	○
		YELLOW	0 to +60	+30	○	○	○	○
		GREEN	0 to +60	+30	○	○	○	○
		CYAN	0 to +60	+30	○	○	○	○
		BLUE	0 to +60	+30	○	○	○	○
		MAGENTA	0 to +60	+30	○	○	○	○
		C.DETAIL RESET	–	NO	○	○	○	○
	GAMMA		1.8 to 2.4	2.2	○			
SCREEN	H.POSITION		0 to +255 (for PC signal) 0 to +127 (for video signal)	+128 (for PC signal) +64 (for video signal)	○	○	○	○
	V.POSITION		0 to +255 (for PC signal) 0 to +127 (for video signal)	+28 (for PC signal) +64 (for video signal)	○	○	○	○
	CLOCK		0 to +255	+128			○	
	PHASE		0 to +31	+16			○	
	H.SIZE		0 to +63	0	○	○	○	○
	V.SIZE		0 to +63	0	○	○	○	○
SETUP	BRT.ENHANCE		OFF-ON	OFF	○			
	SUB VOLUME		0 to 20	20	○			
OPTION (Page 1)	PROGRAM TIMER		Refer to pg. 223	Refer to pg. 223	○			
	SCREEN MASK		OFF-INVERSE-WHITE-RED-GREEN-BLUE-YELLOW	OFF	○			
	SIDE MASK	R.LEVEL	0 to +255	+80	○			
		G.LEVEL	0 to +255	+80	○			
		B.LEVEL	0 to +255	+80	○			
		AUTO SIDE MASK	OFF-ON	OFF	○			
	VIDEO WALL	DIVIDER	OFF-1-2x2-3x3-4x4-5x5	OFF	○			
		POSITION	Refer to pg. 229	Refer to pg. 229	○			
		TYPE	NORMAL-ADJUSTED	NORMAL	○			
		AUTO ID	ON-OFF	OFF	○			
		P.ON DELAY	OFF-ON-MODE1-MODE2	OFF	○			
		ABL LINK	ON-OFF	OFF	○			
	BAUD RATE		9600BPS-19200BPS-38400BPS-1200BPS-2400BPS-4800BPS	9600BPS	○			
	ID NO.SET		ALL-01H to FFH	ALL	○			
OPTION (Page 2)	FAN CONTROL		AUTO-MAX	AUTO	○			
	OSD	DISPLAY	ON-OFF	ON	○			
		SIZE	LARGE-SMALL	LARGE	○			
		ANGLE	H-V	H	○			
	FRONT INDICATOR		ON-OFF	ON	○			
	COLOR MODE		NORMAL-STUDIO	NORMAL	○			
	PRO USE	UNDERSCAN	ON-OFF	OFF	○			
		IMAGE PROCESS	NORMAL-PURE-MONO TONE-BLUE ONLY-HIGH CNT	NORMAL	○			
		SIGNAL TYPE	MOTION-STILL-NON-STD	MOTION	○			
	FRC		ON-OFF	ON	○			
OPTION (Page 3)	PWR.ON MODE	INPUT	LAST-INPUT1-INPUT2-INPUT3-INPUT4-INPUT5-MULTI★	LAST	○			
		VOLUME	LAST-0-42	LAST	○			
	SEAMLESS SW	SEAMLESS SW	ON-OFF	OFF	○			
		SELECT1	INPUT1-INPUT2-INPUT3-INPUT4-INPUT5★	INPUT1	○			
		SELECT2	INPUT1-INPUT2-INPUT3-INPUT4-INPUT5★	INPUT2	○			
	MIRROR MODE		OFF-X-Y-XY	OFF	○			
	MULTISCREEN SET	S BY S SIZE	NORMAL-FULL	NORMAL	○			
		S BY S LAYOUT	MODE 1-MODE 2-MODE 3	MODE 1	○			
		PIP SIZE	1-4	2	○			
		FADE PIP	OFF-ON	OFF	○			
		TRANSLUCENT PIP	80%-70%-60%-50%-40%-30%-20%-10%-OFF	OFF	○			
		BANNER PIP	OFF-BOTTOM1-BOTTOM2-BOTTOM3-MID LOW-MID-HIGH-TOP3-TOP2-TOP1-LEFT-RIGHT	OFF	○			
		BANNER INPUT	INPUT1-INPUT2	INPUT1	○			
	REPEAT TIMER		Refer to pg. 253	Refer to pg. 253	○			

★: INPUT3 to INPUT5 are applicable only when the PDA-5003 or the PDA-5004 is installed.

(Note) The OPTION settings are common settings for all inputs.

5.1.5 Last Memory

The timing for the last memory is listed below.
When one of the following operations is performed before the timing is complete, the last memory function may not perform.

- MAIN POWER switch is turned OFF
- Power cord is removed from the power outlet
- The breaker to the power outlet is turned OFF

Item	Saving to Memory
Operation in the normal-operation mode • Power ON/OFF • Switching input • Switching screen size • Volume adjustment • FUNCTIONAL LOCK setting	• Three seconds after an operation • When the standby mode is designated by a remote-control, main-control panel or <POF> command • When the format of the displayed signal changes (NOTE) Of the RS-232C commands that can be used in the normal-operation mode, there are some that cannot be saved in the last memory when using the normal-operation mode. For details, refer to section 5.5, "RS-232C Adjustment (pg. 262)".
Adjustments and settings in the menu mode	• Three seconds after an operation • When the standby mode is designated by a remote-control, main-control panel or <POF> command • When the format of the displayed signal changes
Adjustments and settings in the integrator mode	• Three seconds after an operation • When the standby mode is designated by a remote-control, main-control panel or <POF> command • When the format of the displayed signal changes
Adjustments and settings in the RS-232C adjustment	• Three seconds after a command is sent, or when the next command is sent within four seconds • When the standby mode is designated by a remote-control, main-control panel or <POF> command • When an adjustment or setting is changed using a command • When the format of the displayed signal changes

Note

If the system is started or stopped by turned ON/OFF from a circuit breaker, use the system only after first saving adjustments and settings in the last memory according to the timing described above. Also, with this operating method, count errors may occur in the hour meter.

5.1.6 Aging

After the power has been turned ON, input a white 100 % signal to age thus stabilize the unit (about 30 minutes). When adjustments are made after aging is performed, it possible to perform more precise adjustments.

Note

When a still screen is displayed for a long period, the image may possibly be burned in to the screen.

5.2 Normal Operation Mode

5.2.1 About normal operation mode

The following controls are possible in the normal operation mode.

① Switching input

- Pressing the [INPUT1] to [INPUT5] buttons on the remote control changes the input that setting.
- Pressing the [INPUT] button on the main-control panel changes the input each time the button is pressed.

Note

When a PDA-5003 or a PDA-5004 is not installed, the input switches only between INPUT1 and INPUT2.

② Switching the screen size

- Each time the [SCREEN SIZE] button on the remote control or main-control panel is pressed, the display screen size changes.

  When reproducing a PC signal

  DOT BY DOT → 4:3 → FULL → DOT BY DOT

  When reproducing a video signal (signal other than a PC signal) ★ (Applicable only when a PDA-5003 or a PDA-5004 is installed.)

  4:3 → FULL → WIDE → ZOOM → 2.35:1 → 14:9 → 4:3

Note

- The reproducible screen size changes according to the input signal.
  Refer to the section 5.1.3, "List of Input Correspondence Signals" (pg. 146).
- To select 'Underscan', set the PRO USE option in the integrator mode.

> When this display is to be used for commercial use or for public viewing, such as in a coffee shop or hotel, reducing or enlarging the screen by using the screen-size-switching function could infringe on the copyright of the creator according to copyright laws.

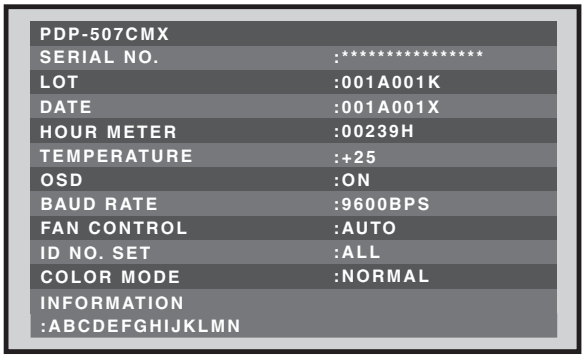
② Display call

Ⓐ Pressing the [DISPLAY] button on the remote control or main-control panel displays the current input function, horizontal and vertical frequency of the input signal, the type of signal, and the screen size (DISPLAY CALL 1).

Note

The displayed horizontal and vertical frequencies are measured values. Measurement errors are possible.

Ⓑ Pressing the [DISPLAY] button on the remote control or main-control panel again for three seconds or more when the display described in Ⓐ above is displayed, cause various settings and internal temperature to be displayed as shown below (DISPLAY CALL 2).



* Illustration depicts PDP-507CMX model.

SERIAL NO.: Displays the serial number of the product
LOT/DATE: Displays the manufacturing control number
HOUR METER: Displays the conduction time for the product
TEMPERATURE: Displays the outside air temperature that is measured by a temperature sensor located in the product
Other items: Displays the settings in the integrator mode

Note

When the displayed temperature is high, the panel shuts down. However, the display itself should always be used as an indicator.

④ Volume Adjustment/Muting

- Pressing the [VOLUME+] button on the remote control or main-control panel raises the volume.
- Pressing the [VOLUME-] button on the remote control or main-control panel lowers the volume.
- Pressing the [MUTING] button on the remote control switches between no sound (muting ON) and sound (muting OFF) each time the button is pressed.

Note

Muting is cleared when the power is turn OFF.

⑤ Auto screen adjustment

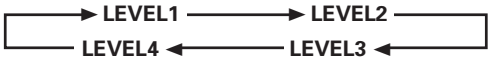
- Pressing the [AUTO SET UP] button on the remote control or main-control panel during PC signal input causes the 'SCREEN' in the menu mode to adjust automatically. If a multi screen is being used, only the main screen can be adjusted.

Note

- Adjustment cannot be performed from INPUT2.
- Adjustment cannot be performed well when the input signal is a low brightness signal such as black, or is showing movement.
- Automatic SCREEN adjustment values are reflected under 'SCREEN' in the menu mode.

⑥ Point Zoom (only when using the remote control)

- Pressing the [POINT ZOOM] button on the remote control designates the POINT ZOOM screen. Each time the button is pressed, the magnification rate changes as shown below.

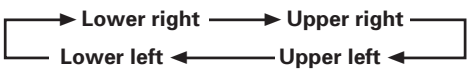


- During magnification, it is possible to scroll the display position using the [▲/▼/◄/►] buttons on the remote control.

⑦ Multi screen (only when using the remote control)

- Pressing the [SPLIT] button on the remote control designates a multi screen. Each time the button is pressed, the screen changes as shown below.

- When input is switched during a multi-screen display, input of the main screen is switched.
- When the [SUB INPUT] button on the remote control is pressed during a multi-screen display, the input of the sub screen is switched.
- When the [SWAP] button on the remote control is pressed during a multi-screen display, the main screen and sub screen are switched.
- Press the [◄/►] buttons on the remote control during multi-screen mode to change the sound on the main screen and the subscreen. This overrides last memory.
- When the [PIP SHIFT] button on the remote control is pressed during a PinP screen display, the display position of the sub screen changes as shown below.



Note

For the setting of size and layout for Side-by-side and for the size of Picture-in-picture, refer to "Integrator Mode" (pg. 250 to 251).

⑧ Some other RS-232C commands besides those described above are also effective.
For details, refer to section 5.5, "RS-232C Adjustment" (pg. 262).

Note

- Same function display is possible for main input and sub input. However, during circuit processing, since the high-image quality circuit is used for the main input, the screen looks different on the sub screen.
- While the video wall is set, multi-screen display is unavailable.
- When the video wall is set or during multi-screen display, point zoom is unavailable.

5.3 Menu Mode

5.3.1 About menu mode

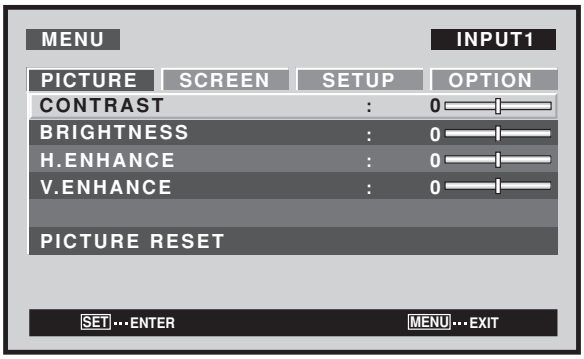
1) Entering/leaving the menu mode
   - Pressing the [MENU] button on the remote control or main-control panel in the normal-operation mode causes the menu screen to appear.
     Pressing the [MENU] button while in the menu mode causes the menu to close.

2) When performing adjustment in the menu mode...
   - The signal and screen adjustment values are saved in memory for each input function and input signal. For details, refer to section 5.4.4, "PICTURE, White Balance and SCREEN Position Adjustment Values Memory Area Tables" (pg. 257).

3) Precautions
   (1) In the following cases, the menu closes automatically:
      - Input is switched
      - No operation for approximately three minutes
   (2) For details about menu adjustments, refer to the Operating Instructions.
   (3) It is recommended that adjustment and settings be performed with signal that will actually be input.
   (4) The items that can be adjusted and set differ according to the input signal. Also, changing settings is only possible when no video signal is input.

5.3.2 Concerning the display of the OSD of each item

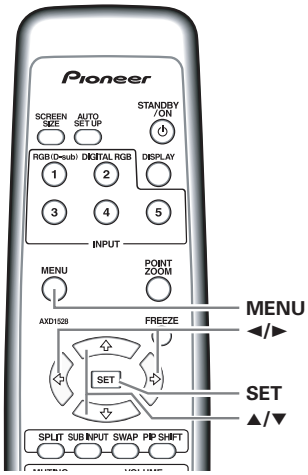
Example of Menu Display:



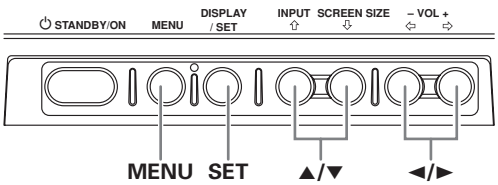
Images shown here may differ from the actual display image.

5.3.3 Example of a Menu Mode Operation

The basic operation in the menu mode will be explained using brightness adjustment as an example.

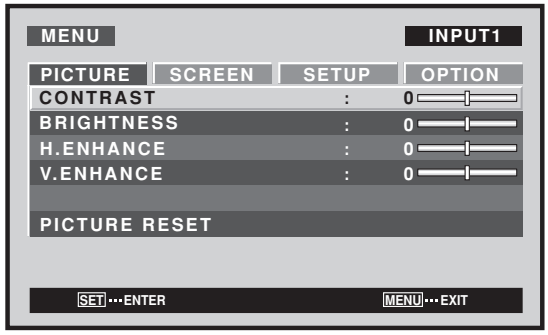


Remote control unit

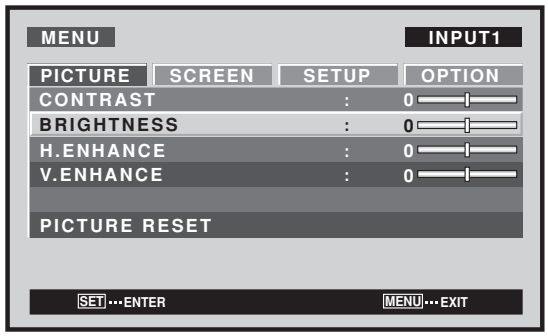


Main-control panel

1 Press the MENU button to display the menu screen.



2 Use the ▲/▼ buttons to select the adjustment item then press the SET button.



3 Use the ◄/► buttons to adjust the picture quality as desired.

It is possible to move to other adjustment items with the ▲/▼ buttons.

4 Press the SET button.
Pressing the SET button writes the value into memory and returns the display to the step 2 screen.

5 When the setup is finished, press the MENU button to exit the menu screen.

5.3.4 Adjustment and setting in the Menu Mode

1) Power Management Setting

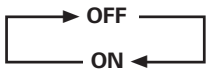
When no video signal (synchronizing signal) is detected, this function automatically sets the energy saving state to save power.

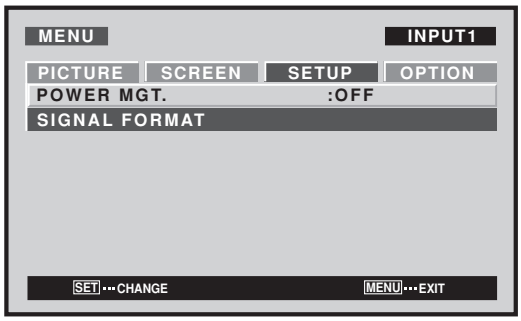
- To disable the energy saving function, set to [OFF].
- When there is PC signal input:
  To switch between the normal-operation state and the energy saving state is depended upon the presence of an input signal, set 'POWER MANAGEMENT' to [ON].

Factory setting: OFF

① Select 'SETUP'.

② Place the cursor over 'POWER MANAGEMENT' and change the setting with the [SET] button.
Each time the [SET] button is pressed, the setting is changed as shown below.





Note

- To return from the energy saving state (by power management) to the normal operation state, operate the PC or press the [INPUT] button on the remote control or main-control panel.
  However, during SYNC ON G or composite SYNC input, operation does not return by simply operating the personal computer. After operating the personal computer, press the [INPUT] button.
- The power consumption during power standby.
  PDP-507CMX: 0.6 W
  PDP-427CMX: 1.2 W

2) Signal Format Setting

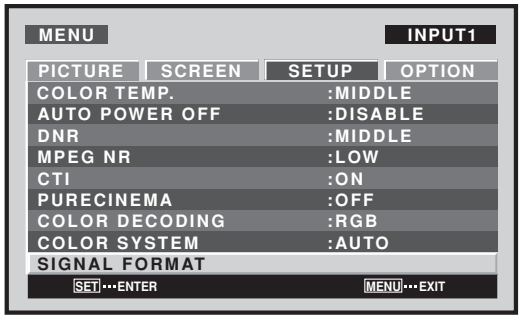
This display automatically identifies PC signals and video signals such as from a DVD player by the frequency of the input signal. The panel is equipped with a function for identifying the resolution of a PC signal.

Factory setting: AUTO

① Select 'SETUP'.

② Place the cursor over 'SIGNAL FORMAT' then press the [SET] button.

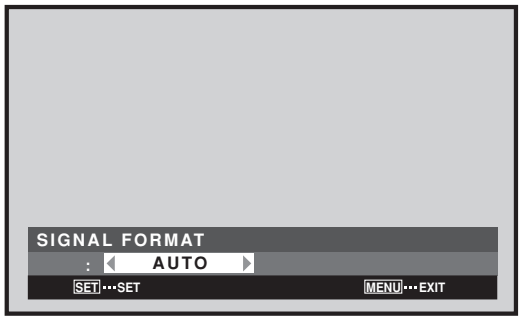
Screen ②



③ Press the [◄/►] buttons to change the setting.
Each time a [◄/►] button is pressed, the signal format changes as shown below.

- AUTO ..... It is distinguished as in "5.1.3 List of Input Correspondence Signals 1) Input correspondence signals personal computer signals" (pg. 146 to 151)
- Others ..... Selectable resolutions are displayed

Screen ③



Note

The display method and selectable screen size differs for each setting. In order to obtain a proper reproduction method and screen size, check the signal format setting when the signal is input then change the setting as necessary.

If it is not displayed correctly when "AUTO" has been set, change the setting of the signal format with reference to the following table.

■ PC signal

Resolution	V polarity	H polarity	V [Hz]	H [kHz]	Menu mode Signal format Set values	RS232C Signal format Set values	Remarks
720x400	-	-	70.0	31.5	720x400	TYPE 1	
640x480	Neg.	Neg.	60.0	31.5	640x480	TYPE 1	
848x480	Pos.	Pos.	60.0	31.0	848x480	TYPE 3	
852x480	-	-	60.0	31.7	852x480	TYPE 2	
800x600	-	-	56.0	35.2	800x600	TYPE 1	
1024x768	Neg.	Neg.	60.0	48.4	1024x768-1	TYPE 1	
1024x768	-	-	60.0	49.7	1024x768	TYPE 1	
1024x768	-	-	70.0	56.5	1024x768-1	TYPE 1	
1024x768	-	-	75.0	60.0	1024x768	TYPE 1	
1280x768	-	-	56.0	45.1	1280x768	TYPE 1	
1280x768	Neg.	Pos.	59.8	48.0	1280x768-1	TYPE 5	
1280x768	Pos.	Neg.	60.0	47.8	1280x768-2	TYPE 4	
1280x768	Pos.	Neg.	70.0	56.1	1280x768-1	TYPE 3	

Resolution	V polarity	H polarity	V [Hz]	H [kHz]	Menu mode Signal format Set values	RS232C Signal format Set values	Remarks
1360x768	Pos.	Pos.	60.0	47.7	1360x768	TYPE 2	
1376x768	Pos.	Neg.	59.9	48.3	1376x768	TYPE 3	
1280x800	-	-	60.0	49.7	1280x800	TYPE 2	
1280x854	-	-	60.0	53.1	1280x854	TYPE 3	
1152x864	-	-	60.0	53.7	1152x864	TYPE 4	
1152x864	-	-	75.0	67.5	1152x864	TYPE 2	
1280x1024	Pos.	Pos.	60.0	63.9	1280x1024	TYPE 1	
1400x1050	Neg.	Neg.	59.9	64.1	1400x1050-1	TYPE 2	
1680x1050	-	-	60.0	65.3	1680x1050	TYPE 7	
1920x1080	-	-	50.0	56.3	1920x1080	TYPE 3	Only INPUT2 effective. DVI SETUP is set on the PC.
1920x1080	-	-	60.0	67.5	1920x1080	TYPE 9	Only INPUT2 effective. DVI SETUP is set on the PC.
1600x1200	-	-	60.0	75.0	1600x1200	TYPE 5	
1920x1200	-	-	59.9	74.6	1920x1200	TYPE 3	
1920x1200	-	-	60.0	74.0	1920x1200RB	TYPE 4	

3) Menu Language Display Setting

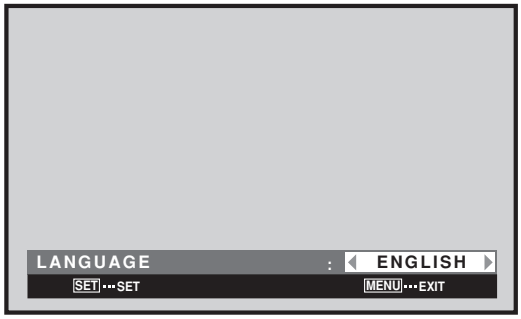
The factory setting for the menu display language is English. To change to another language, set the selection in the menu.

Factory setting: ENGLISH

① Select 'OPTION'.

② Place the cursor over 'LANGUAGE' and press the [SET] button.

Screen ②

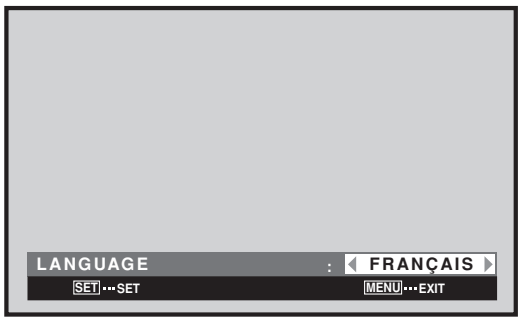


③ Each time a [◄/►] button is pressed, the language changes as shown below.

ENGLISH ⟷ FRANÇAIS ⟷ ESPAÑOL
日本語 ⟷ ITALIANO ⟷ DEUTSCH

With the desired language displayed, press the [SET] button.

Screen ③



Note

Setting the display language for either INPUT1 or INPUT2 sets the language for both inputs.

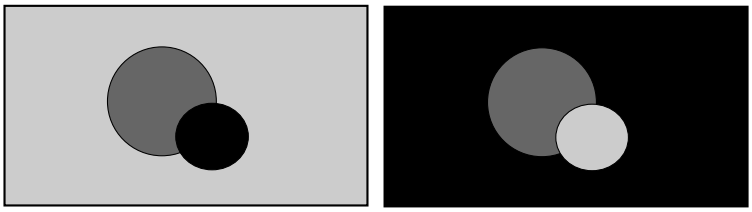
4) Energy Saving Setting

This is a function that reduces power consumption and reduces deterioration of the panel. This setting controls the brightness of the screen according to the input signal.

- To make the screen bright and easy to see: Set 'ENERGY SAVE: STANDARD1, STANDARD2 (STANDARD)*'.
- To perform control according to the brightness of the room and to adjust the screen according to the surroundings: Set 'ENERGY SAVE: AUTO'.
- To reduce power consumption: Set 'ENERGY SAVE: MODE1, MODE2'.
- To reduce deterioration of the panel such as burning: Set 'ENERGY SAVE: MODE 3'.
- To temporarily turn off the present screen display: Set 'ENERGY SAVE: MUTE' and press the MENU button. Image mute starts at the same time that the menu disappears.

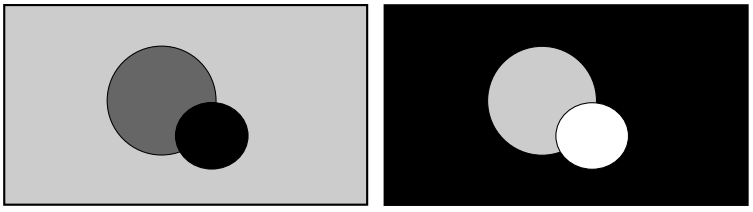
Factory setting: STANDARD1 (STANDARD)*

Differences in video reproduction by energy saving settings (illustration)
For this kind of input signal



(As a standard)
When the white window is displayed, the peak brightness is decreased as shown below.
- MODE1: Decreased about 50%
- MODE2: Decreased about 60%
- MODE3: Decreased about 75%

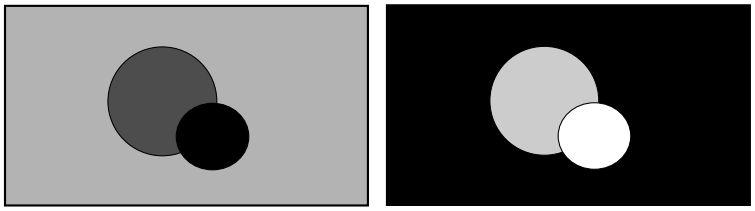
STANDARD1, STANDARD2 (STANDARD)*



For an overall bright video, there is no change (Figure on the left).
For an overall dark video, the peak brightness is reproduced even brighter (Figure on the right).

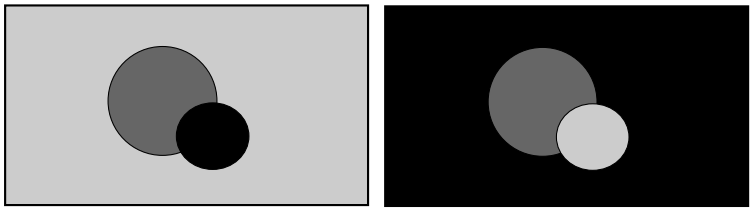
AUTO The brightness is automatically changed within the STANDARD (bright) to MODE2 (dark) range according to the brightness of the room.

MODE1, MODE2



Power consumption is lowered by reducing the brightness of an overall bight video (Figure on the left).
Similar to in the STANDARD setting, an overall dark video is peak brightness is reproduced even brighter (Figure on the right).
The peak brightness in MODE2 is decreased by a set amount with respect to that in MODE1, however it is reproduced brighter than in MODE3.

MODE3



Input signal graduation is not controlled but reproduced accurately. Deterioration of the panel due to burning is reduced since the peak brightness of an overall dark video is not increased.

MUTE It temporarily shuts off the screen that is displayed.
To cancel MUTE, press the MENU button, INPUT button etc.

* PDP-427CMX

Note

The external sensor changes in stages; from an external light of 200 lux (rough value) to external light of 0 lux.

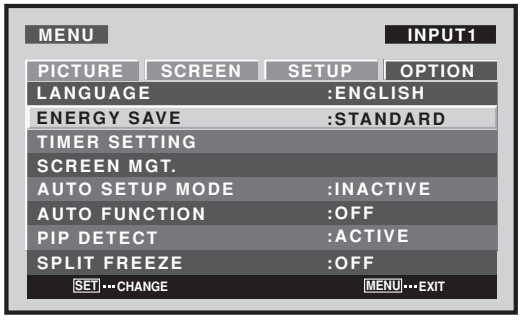
① Select 'OPTION'.

② Place the cursor over 'ENERGY SAVE' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

STANDARD1 → STANDARD2 (STANDARD)* → AUTO → MUTE → MODE3 → MODE2 → MODE1 →

*** PDP-427CMX**

Screen ②



The 'ENERGY SAVE' setting is common for all inputs.

5) Timer Setting

The present day of the week, time, and daylight savings time are set.

① Select 'OPTION'.

② Place the cursor on 'TIMER SETTING' then press the [SET] button.

③ Place the cursor on 'PRESENT TIME' then press the [SET] button.

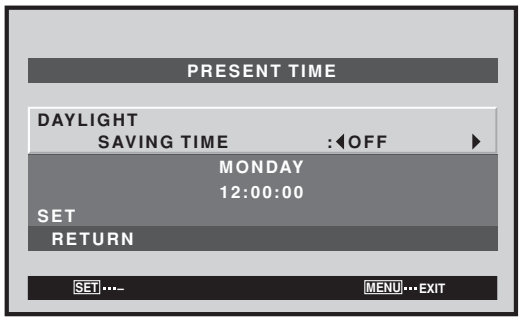
④ Adjust each item by pressing the ▲/▼/◄/► buttons.

DAYLIGHT SAVING TIME ..... sets daylight savings time
ON: Displays time as present time + one hour
OFF: Disables [DAYLIGHT SAVING TIME] mode
Week ..... Set current day of the week
Hour, Minute ..... Sets to current time.

Note

The set time may slow by approximately one minute per month from the actual time.

Screen ③



The 'TIMER SETTING' is set for all inputs.

6) Program/Repeat Timer Setting

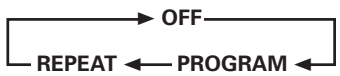
It can operate the preset PROGRAM TIMER and REPEAT TIMER.

Factory setting: OFF

① Select 'OPTION'.

② Place the cursor on 'TIMER SETTING' then press the [SET] button.

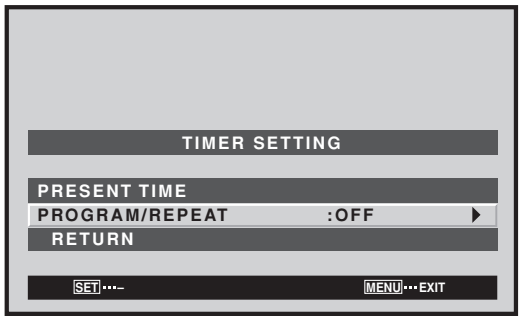
③ Change the setting by pressing the ◄/► buttons to move the cursor to the 'PROGRAM/REPEAT'.
Each time a ◄/► button is pressed, the setting changes as shown below.



Note

For the PROGRAM/REPEAT TIMER setting, refer to "Program Timer Setting (pg. 223)" and "Repeat Timer Setting (pg. 253)" in Integrator Mode.

Screen ③



7) Orbiter Setting

This function gradually moves the display position of the screen periodically screen position is moved at random, horizontally or vertically).

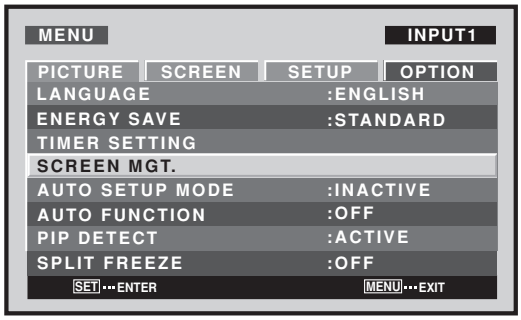
Setting 'MODE1' to 'MODE3' is effective in reducing screen burn when a still image is displayed.

Factory setting: OFF

① Select 'OPTION'.

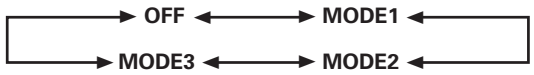
② Place the cursor on 'SCREEN MGT.' then press the [SET] button.

Screen ②



② Place the cursor on 'ORBITER' then press the [◄/►] buttons to change the settings.

Each time a [◄/►] button is pressed, the setting changes as shown below.

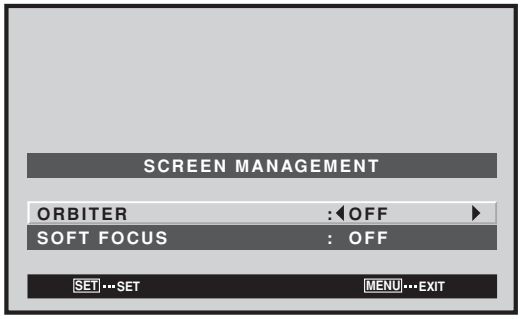


MODE1 ..... The size is reduced so the picture is completely in the display area.

MODE2 ..... The size is increased so there are no black bands in the display area.

MODE3 ..... It is displayed at the same size.

Screen ③



Note

- When 'MODE1' or 'MODE2' has been set, it moves smoothly.
- In 'MODE3', it moves in dot increments. The entire screen moves one dot horizontally or vertically approximately every minute. The maximum movement is four dots.
- When it is set to 'OFF', the orbiter of the PIP subscreen is still ON.

The 'ORBITER' setting is common for all inputs.

8) Soft Focus Setting

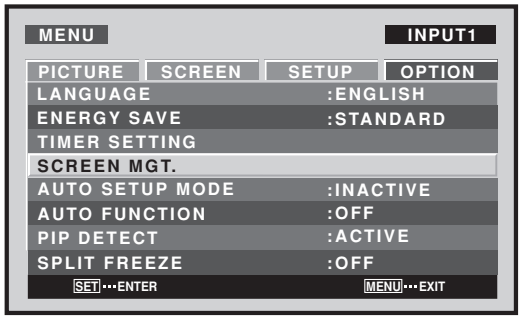
Images are softened by suppressing the edge contrast.

Factory setting: OFF

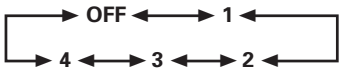
① Select 'OPTION'.

② Place the cursor on 'SCREEN MGT.' then press the [SET] button.

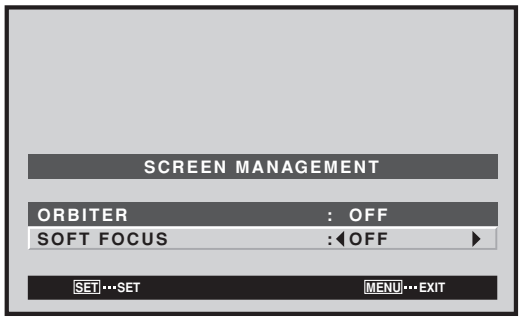
Screen ②



② Place the cursor on 'SOFT FOCUS' then press the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.



Screen ③



The 'SOFT FOCUS' setting is common for all inputs.

9) Auto Set Up Mode Setting

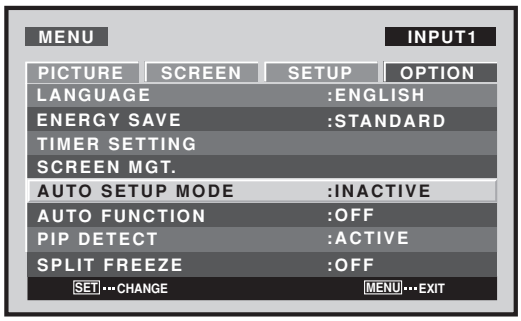
This function automatically adjusts the signal when the power is turned ON, when the input is changed, and when the type of input signal is changed.

Factory setting: INACTIVE

① Select 'OPTION'.

② Place the cursor on 'AUTO SETUP MODE' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

Screen ②



Note

- Items one and three are adjusted automatically.
  'SCREEN' Adjustment inside the menu: 1. 'POSITION'
  2. 'CLOCK'
  3. 'PHASE'
- The adjustment items are the same as when the 'AUTO SET UP' button is pressed on the remote control; however, precision may be a little inferior. This difference in precision is due to short processing time in the menu settings AUTO SET UP MODE.
- It may not be possible to precisely adjust an input signal such as when the signal has low brightness. Set the AUTO SET UP MODE to INACTIVE, and make adjustments as explained in the following section, 'SCREEN, CLOCK, PHASE'.
- When the AUTO SET UP MODE is set to ACTIVE and 'SCREEN' is manually adjusted, 'AUTO SETUP MODE: ACTIVE' is displayed.

This is to warn you that although adjustment is manual, when the input changes or when the type of signal changes on the outside, the AUTO SET UP MODE functions and the adjusted values will be written over.

10) Screen Position, Clock Frequency and Clock Phase Adjustment

In AUTO SET UP, the position and clock are optimally set. However, depending on the type of signal, adjustment may be off. If this should occur, refer to the procedure below and make the adjustment manually.

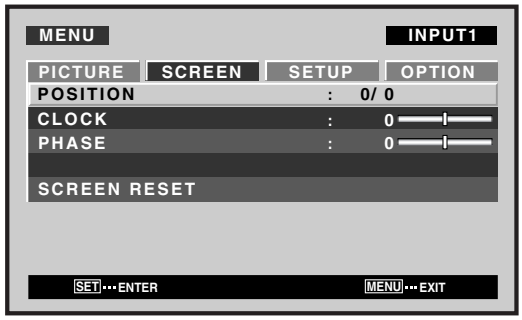
Example) When a PC signal is input to INPUT1 (1024 x 768)

① Set the screen size to 'DOT BY DOT'.

② Select 'SCREEN'.

③ Place the cursor on 'POSITION' then press the [SET] button.

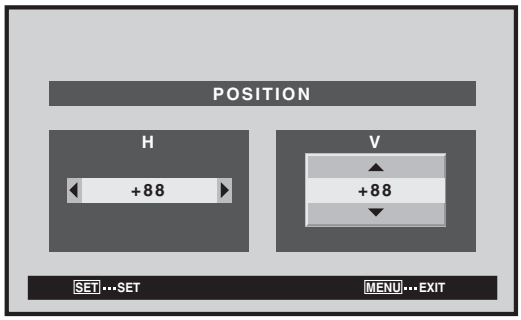
Screen ②



④ Use the [▲/▼] and [◄/►] buttons to adjust the screen position.
Here, the top and left side of the video display are properly set.

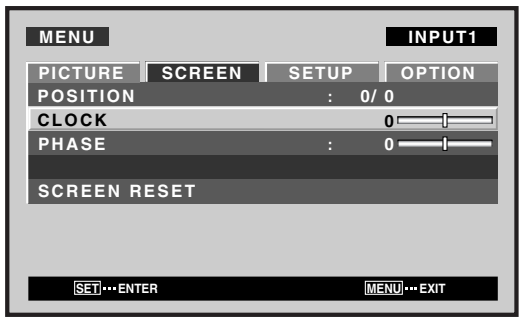
1. With the [▼] button, lower the display until the mask (black portion) protrudes into the top of the image.
2. With the [▲] button, move the display to the point where the mask at the top disappears.
3. With the [►] button, move the display until the mask (black portion) protrudes into the left side of the image.
4. With the [◄] button, move the display to the point where the mask on the left side disappears.

Screen ④



⑤ Place the cursor on 'CLOCK' then press the [SET] button.

Screen ⑤



⑥ Use the [◄/►] buttons to adjust the click frequency.
In step ④, the left side was aligned while here the right side is aligned.

1. With the [►] button, move the display until the mask (black portion) protrudes into the right side of the image.
2. With the [◄] button, move the display to the point where the mask on the right side disappears.

Screen ⑥

⑦ In the adjustment in steps ⑤ and ⑥, the left side of the screen moves. With 'POSITION', accurately adjust the left side of the video display again.
As in step ④, used the [◄/►] buttons to align the left side.

⑧ In the adjustment in step ⑦, the right side of the screen moves. With 'CLOCK', adjust the right side again.
As in step ⑥, use the [◄/►] buttons to align the left side.
Repeat steps ⑦ and ⑧ until the adjustment value converges, then adjust the 'PHASE'.
There are vertical lines so it is easier to adjust the screen if a signal having edges is input.

⑨ Place the cursor on 'PHASE' then press the [SET] button.

⑩ Using the [◄/►] buttons adjust the clock phase.
Move the vertical edge of the image to the point where it becomes bold.

Adjustment is now complete.

11) Auto Function Mode Setting

With the Auto Function mode it is possible to automatically change the input when a signal is detected.

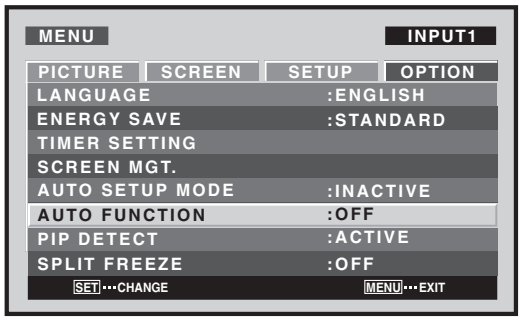
Factory setting: OFF

① Select 'OPTION'.

② Place the cursor over 'AUTO FUNCTION' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

- When INPUT1 is selected, this function automatically switches to that input when the signal is detected. Also, in the Auto Function mode, after the input switches and the signal input stops, the Auto Function returns to the input that was used before the switch.

Screen ②



Note

- The Auto Function mode is unavailable when 'OFF' is selected.
- When SYNC ON G or a component signal is input to INPUT1, the Auto Function is unavailable does not function.
- After the input has been switched in the Auto Function mode, press the [INPUT] button and select a different input. The Auto Function mode activates when it detects a change in the selected input signal (from a no-input state to an input state).
- When the power is turned OFF/ON, the Auto Function mode activates when the signal is input to the selected input.
- The Auto Function mode is unavailable when the Menu displays, during POINT ZOOM, or during multi-screen display.
- When the Auto Function mode is set to 'INPUT1' or 'INPUT4', 'AUTO' appears under the option that displays the selected input (INPUT1 to INPUT5).

12) PIP DETECT Setting

During picture-in-picture display, if no subscreen input signal is detected then the black borders of the subscreen are automatically turned off.

The subscreen mode function is disabled during side-by-side display.

* The lack of a subscreen input signal means there is no video signal or sync signal.

Factory setting: ACTIVE

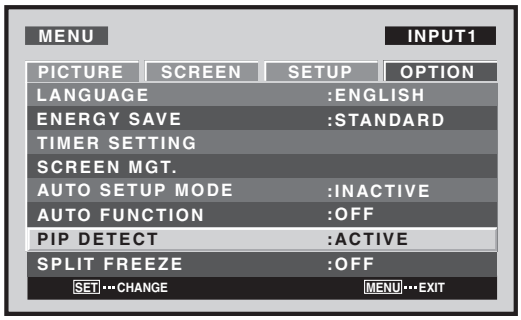
① Select 'OPTION'.

② Place the cursor on 'PIP DETECT' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

- ACTIVE ..... When no subscreen input signal is input, no subscreen is displayed. When the subscreen input is later restored, the subscreen is displayed again.
- INACTIVE .. When no subscreen signal is input, the black border is visible.

The 'PIP DETECT' setting is common for all inputs.

Screen ②



13) SPLIT FREEZE Setting

For setting other than [OFF], the image displayed when the FREEZE button is pressed is displayed in a subscreen as a freeze-frame image.

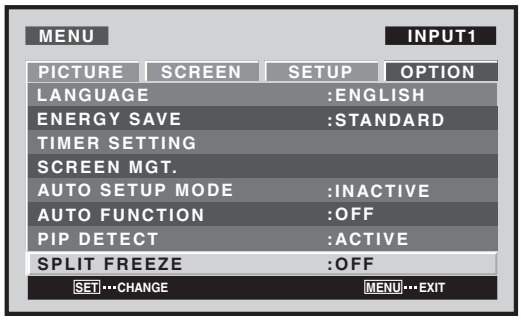
Factory setting: OFF

① Select 'OPTION'.

② Place the cursor on 'SPLIT FREEZE' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

- OFF ..... The still picture displayed at the time the FREEZE button was pressed is displayed as a single fullscreen image
- S BY S ..... When the FREEZE button is pressed, the freeze-frame image is displayed in the side-by-side subscreen
- PIP ..... When the FREEZE button is pressed, the freeze-frame image is displayed in the picture-in-picture (left-bottom to left-top) subscreen.

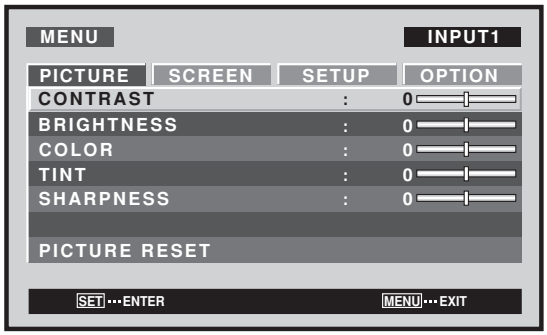
Screen ②



The 'SPLIT FREEZE' setting is common for all inputs.

5.3.5 Concerning the display of the OSD of each item (Applicable only when a PDA-5003/PDA-5004 is installed.)

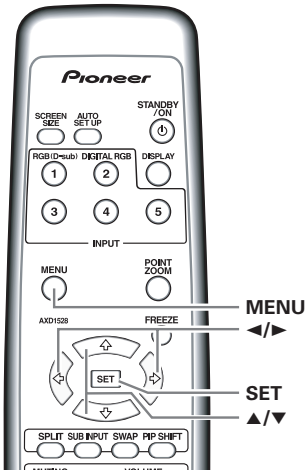
Example of Menu Display:



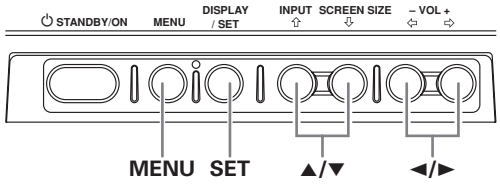
Images shown here may differ from the actual display image.

5.3.6 Example of a Menu Mode Operation (Applicable only when a PDA-5003/PDA-5004 is installed.)

The basic operation in the menu mode is explained using brightness adjustment as an example.

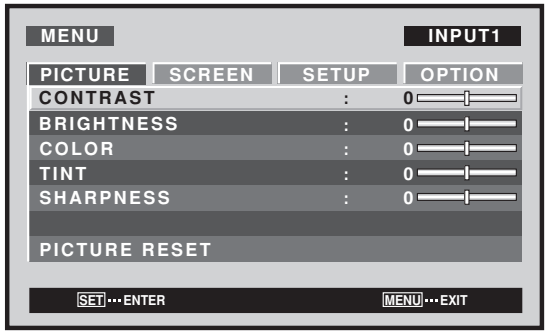


Remote control unit

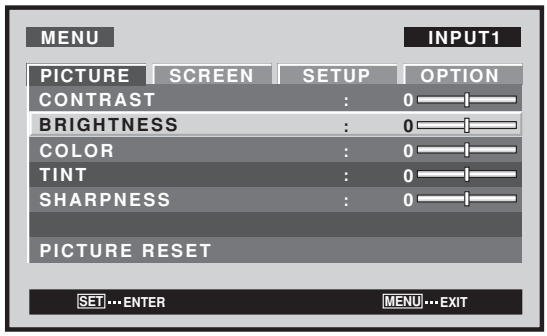


Main-control panel

1 Press the MENU button to display the menu screen.



2 Use the ▲/▼ buttons to select the adjustment item then press the SET button.



3 Use the ◄/► buttons to adjust the picture quality as desired.

It is possible to move to other adjustment items with the ▲/▼ buttons.

4 Press the SET button.
Pressing the SET button writes the value into the memory and returns the display to the step 2 screen.

5 When the setup is finished, press the MENU button to exit the menu screen.

5.3.7 Adjustment and setting in the Menu Mode
(Applicable only when a PDA-5003/PDA-5004 is installed.)

1) Color Temperature Setting

The color temperature of the video signal input can be set.

Setting should be performed for INPUT1 to INPUT5 in accordance with the following:

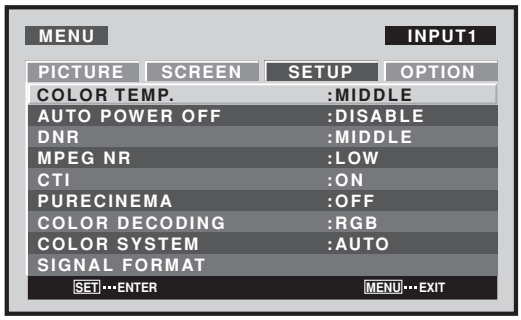
- LOW: Corresponds to – 2000 k
- MID LOW: Corresponds to – 1000 k
- MIDDLE: Corresponds to ± 0k (standard)
- MID HIGH: Corresponds to + 1000 k
- HIGH: Corresponds to + 2000 k

Settable condition:	When there is video signal input
Factory setting:	MIDDLE

① Select 'SETUP'.

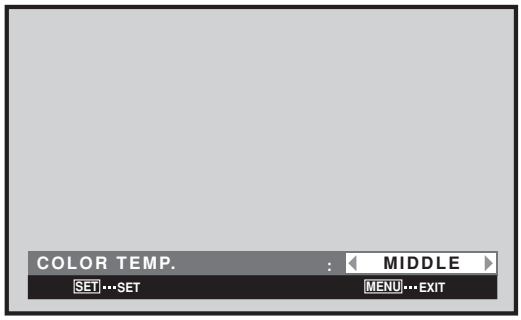
② Place the cursor over 'COLOR TEMP.' then press the [SET] button.

Screen ②



③ Each time a [◄/►] button is pressed, the setting changes as shown below.

Screen ③



2) Power Management and Auto Power OFF Setting

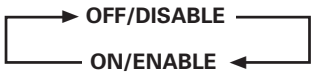
When no video signal (synchronizing signal) is detected, this function automatically sets the energy saving state in order to save power.

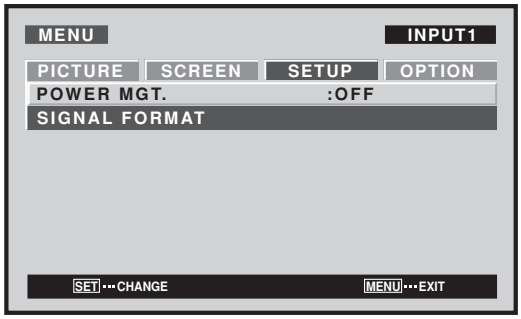
- To disable the energy saving function, set to [OFF/DISABLE].
- When there is video signal input:
  To set the power standby state when the input signal is not detected within eight minutes, set 'AUTO POWER OFF' to [ENABLE].
- When there is PC signal input:
  To switch between the normal-operation state and the energy saving state depending on whether or not there is an input signal, set 'POWER MANAGEMENT' to [ON].

Settable condition	:	Power management: INPUT1, INPUT2 (PC signal), INPUT5 Auto power OFF: Conditions other than those above
Factory setting	:	OFF/DISABLE

① Select 'SETUP'.

② Place the cursor over 'POWER MANAGEMENT (AUTO POWER OFF)' and change the setting with the [SET] button.
Each time the [SET] button is pressed, the setting is changed as shown below.





Note

- During video signal input:
  To return to normal operation, press the power button on the remote control or the main control panel.
  Even if the video signal is input, it will not return.
- During personal computer signal input:
  To return to normal operation, press the power button on the remote control or the main control panel. It can not be returned by operating the personal computer or by pressing the [INPUT] button on the remote control or the main operating panel. But during G ON SYNC input, only operating the personal computer will not cause it to return. After operating the personal computer, press the [INPUT] button.
- The power consumption during power standby.
  PDP-507CMX: 0.6 W
  PDP-427CMX: 1.2 W

3) DNR (digital noise reduction) Setting

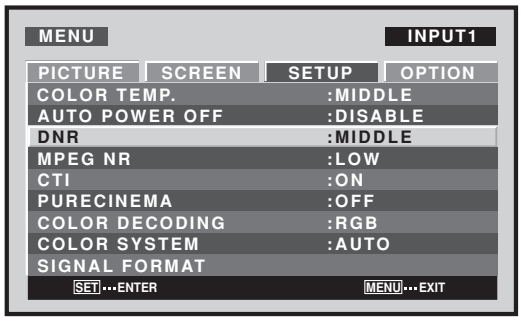
The DNR (digital noise reduction) setting can be changed to improve the S/N ratio when a video signal is input. The setting should be performed for each input (INPUT1 to INPUT 5) and each signal.

Settable conditions:	When there is video signal input
Factory setting:	MIDDLE

① Select 'SETUP'.

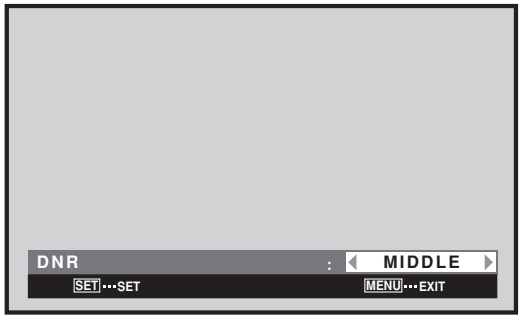
② Place the cursor over 'DNR' then press the [SET] button.

Screen ②



③ Each time a [◄/►] button is pressed, the setting changes as shown below.

Screen ③



Note

DNR is unavailable during 1080p signal or multi screen display.

4) MPEG NR Setting

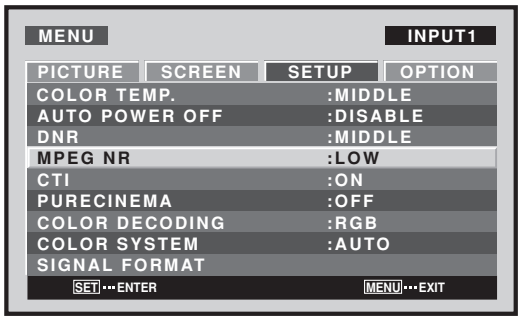
This is set when the noise (mosquito noise) of the video such as in a digital broadcast or DVD is disturbing. The setting should be performed for each input (INPUT1 to INPUT5) and each signal.

Settable condition: When there is video signal input
Factory setting: LOW

① Select 'SETUP'.

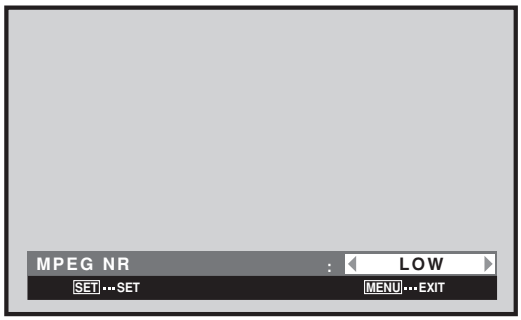
② Place the cursor over 'MPEG NR' then press the [SET] button.

Screen ②



③ Each time a [◄/►] button is pressed, the setting changes as shown below.

Screen ③



5) CTI Setting

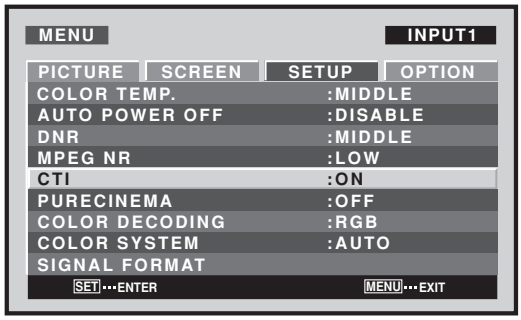
This setting sharpens the color contours as desired.
The setting should be performed for each input (INPUT1 to INPUT5) and each signal.

Settable condition:	When there is video signal input
Factory setting:	ON

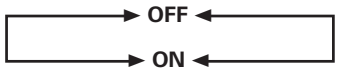
① Select 'SETUP'.

② Place the cursor over 'CTI' then press the [SET] button.

Screen ②



③ Each time a [◄/►] button is pressed, the setting changes as shown below.



Screen ③

6) PURECINEMA Setting

The PURECINEMA function automatically detects video signals such as movies that are filmed at 24 frames per second then converts them to a progressive video signal by a 2-3 pull-down process. Normally, when the PURECINEMA function is used, the 'ON' setting should be used.

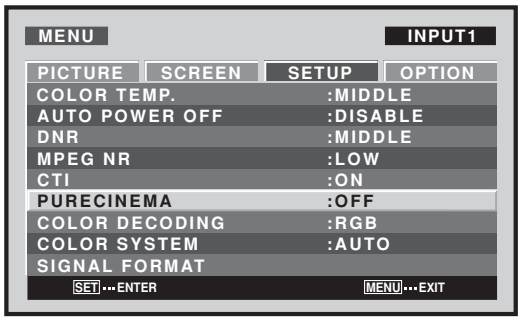
The PURECINEMA setting should be performed for each input (INPUT1 to INPUT5) and each signal.

Settable condition: When there is video signal input
Factory setting: ON

① Select 'SETUP'.

② Place the cursor over 'PURECINEMA' then press the [SET] button.

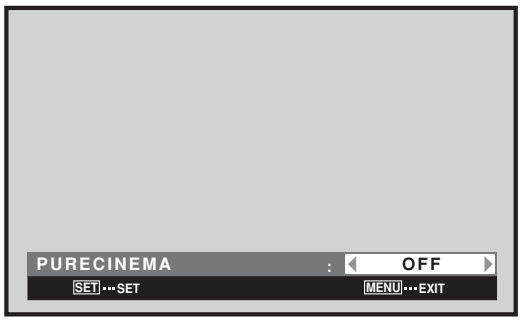
Screen ②



③ Each time a [◄/►] button is pressed, the setting changes as shown below.

- OFF ..... I/P conversion is performed without detecting the signal of the film source
- ON ..... The film source signal is detected then the I/P is converted

Screen ③



Note

The modes that can be selected differ. Specific information is available on the next page.

Input Correspondence Signal

INPUT1, INPUT5

: Not available.

Refresh rate		Signal format	PURECINEMA		Types of display call signals
Vertical f_V (Hz)	Horizontal f_H (kHz)		OFF	ON	
50	15.625	Component RGB	○ ○	○ ○	625i (576i)/SDTV
	28.13	Component RGB			1125i (1080i)/HDTV
	31.25	Component RGB			625p (576p)/SDTV
	37.50	Component RGB			750p (720p)/HDTV
	56.25	Component RGB			1125p (1080p)/HDTV
	62.50	Component RGB			1250p/HDTV
60	15.734	Component RGB	○ ○	○ ○	525i (480i)/SDTV
	31.5	Component RGB	○ ○		525p (480p)/SDTV
	33.75	Component RGB	○ ○	○ ○	1125i (1080i)/HDTV 1125i (1035i)/HDTV
	45.0	Component RGB	○ ○		750p (720p)/HDTV
	67.5	Component RGB	○ ○		1125p (1080p)/HDTV

INPUT2

: Not available.

Refresh rate		Signal format	PURECINEMA		Types of display call signals
Vertical f_V (Hz)	Horizontal f_H (kHz)		OFF	ON	
50	28.13	RGB	○	○	1125i (1080i)/HDT$_V$
	31.25	RGB			625p (575p)/SDTV
	37.50	RGB			750p (720p)/HDTV
60	31.5	RGB	○		525p (480p)/SDTV
	33.75	RGB	○	○	1125i (1080i)/HDTV
	45.0	RGB	○		750p (720p)/HDTV

INPUT3, INPUT4

: Not available.

Refresh rate		Signal format	PURECINEMA		Types of display call signals
Vertical f_V (Hz)	Horizontal f_H (kHz)		OFF	ON	
50	15.625	Composite S Video	○ ○	○ ○	PAL, SECAM, PAL-N (black & white 50 Hz)
60	15.734	Composite S Video	○ ○	○ ○	NTSC, 4.43 NTSC, PAL-M (black & white 60 Hz)

7) Color Decoding Setting

When a video signal is input at INPUT1, INPUT2 and INPUT5, it corresponds to an RGB and component video signal. This setting must comply with the connected device.

The setting should be performed as shown below for INPUT1, INPUT2, and INPUT5.
(Example)

- When reproducing an RGB signal: Set to 'COLOR DECODING: RGB'.
- For reproduction from a DVD player: Set to 'COLOR DECODING: COMPONENT1'.

Settable condition:	INPUT1, INPUT2, INPUT5 When a video signal (signal other than a PC signal) is input
Factory setting:	For 525i, 525p, 625i, 625p signal input: COMPONENT1 For 750p, 1125i, 1125p, 1250p signal input: COMPONENT2

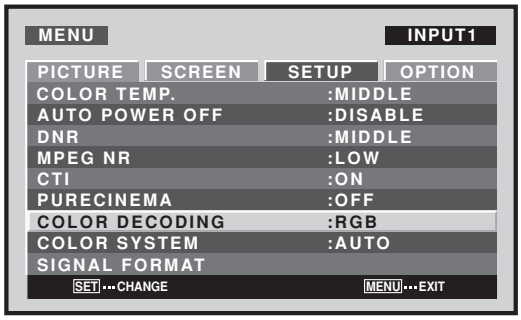
① Select 'SETUP'.

② Place the cursor over 'COLOR DECODING' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

Set 'COLOR DECODING' as follows.
Please take care when assigning settings. Incorrect settings can adversely affect the Plasma Display.

SETUP / Connected component	COLOR DECODING
Component video output of Y/Cb/Cr format. For example, DVD player, etc.	COMP.1
Component video output of Y/Pb/Pr format. For example, digital tuner, etc.	COMP.2
RGB video output of a video deck etc., with RGB output	RGB
DVI video output of an AV component with DVI output port	RGB
RGB video output of a PC	Not supported

Screen ②



8) Color System Setting

INPUT3 and INPUT4 correspond to and automatically determine the various TV systems used in countries around the world.

Normally, this setting is set to 'COLOR SYSTEM: AUTO (Auto detection)', however, in the case of VTR signals with repeated dubbings, proper reproduction of the signal may not be possible (no color, etc.).

In this case, the setting needs to correspond to the input signal as follows.

The setting should be performed for INPUT3 and INPUT4.

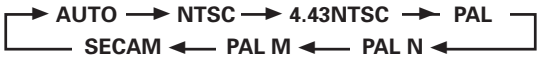
- For NTSC signal input: Set 'COLOR SYSTEM: NTSC'.
- For PAL signal input: Set 'COLOR SYSTEM: PAL'.
- For SECAM signal input: Set 'COLOR SYSTEM: SECAM'.
- For 4.43NTSC signal input: Set 'COLOR SYSTEM: 4.43NTSC'.
- For PAL-M signal input: Set 'COLOR SYSTEM: PAL M'.
- For PAL-N signal input: Set 'COLOR SYSTEM: PAL N'.

By fixing the settings when the input signal is already known in advanced, it is possible to perform smooth image processing and to prevent signal confusion.

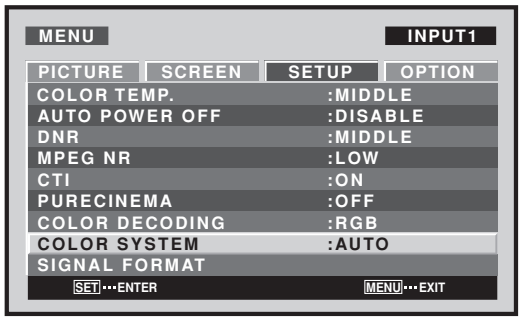
Settable condition: INPUT3, INPUT4
Factory setting: INPUT3: AUTO
INPUT4: AUTO

① Select 'SETUP'.

② Place the cursor over 'COLOR SYSTEM' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.



Screen ②



9) Signal Format Setting

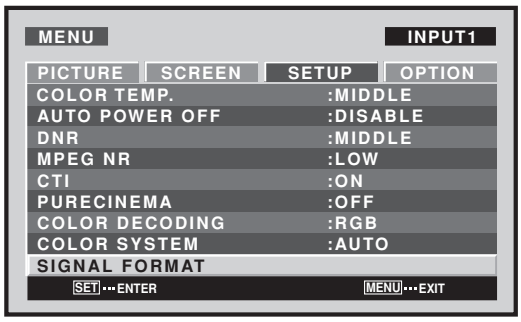
This display automatically identifies PC signals and video signals such as from a DVD player by the frequency of the input signal. The panel is equipped with a function for identifying the resolution of a PC signal.

Factory setting: AUTO

① Select 'SETUP'.

② Place the cursor over 'SIGNAL FORMAT' then press the [SET] button.

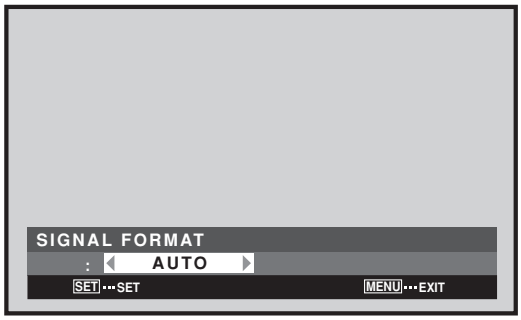
Screen ②



③ Press the [◄/►] buttons to change the setting.
Each time a [◄/►] button is pressed, the signal format changes as shown below.

- AUTO ..... It is distinguished as in "5.1.3 List of Input Correspondence Signals 1) Input correspondence signals personal computer signals" (pg. 146 to 151)
- Others ..... Selectable resolutions are displayed

Screen ③



Note

The display method and selectable screen size differs for each setting. In order to obtain a proper reproduction method and screen size, check the signal format setting when the signal is input. Change the setting as necessary.

If it is not displayed correctly when "AUTO" has been set, change the setting of the signal format with reference to the following table.

■ **PC signal**

Resolution	V polarity	H polarity	V [Hz]	H [kHz]	Menu mode Signal format Set values	RS232C Signal format Set values	Remarks
720x400	-	-	70.0	31.5	720x400	TYPE 1	
640x480	Neg.	Neg.	60.0	31.5	640x480	TYPE 1	
848x480	Pos.	Pos.	60.0	31.0	848x480	TYPE 3	
852x480	-	-	60.0	31.7	852x480	TYPE 2	
800x600	-	-	56.0	35.2	800x600	TYPE 1	
1024x768	Neg.	Neg.	60.0	48.4	1024x768-1	TYPE 1	
1024x768	-	-	60.0	49.7	1024x768	TYPE 1	
1024x768	-	-	70.0	56.5	1024x768-1	TYPE 1	
1024x768	-	-	75.0	60.0	1024x768	TYPE 1	
1280x768	-	-	56.0	45.1	1280x768	TYPE 1	
1280x768	Neg.	Pos.	59.8	48.0	1280x768-1	TYPE 5	
1280x768	Pos.	Neg.	60.0	47.8	1280x768-2	TYPE 4	
1280x768	Pos.	Neg.	70.0	56.1	1280x768-1	TYPE 3	
1360x768	Pos.	Pos.	60.0	47.7	1360x768	TYPE 2	
1376x768	Pos.	Neg.	59.9	48.3	1376x768	TYPE 3	
1280x800	-	-	60.0	49.7	1280x800	TYPE 2	
1280x854	-	-	60.0	53.1	1280x854	TYPE 3	
1152x864	-	-	60.0	53.7	1152x864	TYPE 4	
1152x864	-	-	75.0	67.5	1152x864	TYPE 2	
1280x1024	Pos.	Pos.	60.0	63.9	1280x1024	TYPE 1	
1400x1050	Neg.	Neg.	59.9	64.1	1400x1050-1	TYPE 2	
1680x1050	-	-	60.0	65.3	1680x1050	TYPE 7	
1920x1080	-	-	50.0	56.3	1920x1080	TYPE 3	Only INPUT2 effective. DVI SETUP is set on the PC.
1920x1080	-	-	60.0	67.5	1920x1080	TYPE 9	Only INPUT2 effective. DVI SETUP is set on the PC.
1600x1200	-	-	60.0	75.0	1600x1200	TYPE 5	
1920x1200	-	-	59.9	74.6	1920x1200	TYPE 3	
1920x1200	-	-	60.0	74.0	1920x1200RB	TYPE 4	

■ **Video signal**

Resolution	V polarity	H polarity	V [Hz]	H [kHz]	Menu mode Signal format Set values	RS232C Signal format Set values	Remarks
525p	-	-	60	31.5	525p	TYPE 4	
576p	-	-	50	31.25	576p	TYPE 1	
750p	-	-	60	45	750p	TYPE 3	
1125i (1080i)	-	-	50	28.13	1125i (1080i)	TYPE 2	
1125i (1035i)	-	-	60	33.75	1125i (1035i)	TYPE 3	
1125i (1080i)	-	-	60	33.75	1125i (1080i)	TYPE 2	
1080p	-	-	50	56.25	1080p	TYPE 1	
1125p	-	-	60	67.5	1125p	TYPE 8	
1250p	-	-	50	62.5	1250p	TYPE 2	

10) DVI Setting

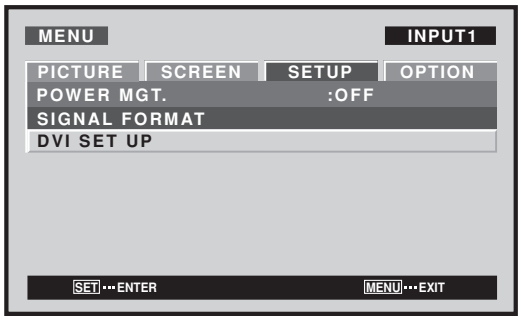
Choose the component type (either [PC] or [VIDEO]) that is connected to INPUT2.

Settable condition:	INPUT2
Factory setting:	PLUG/PLAY: PC
	BLACK LEVEL: LOW

① Select 'SETUP'.

② Place the cursor on 'DVI SET UP' then press the [SET] button.

Screen ②

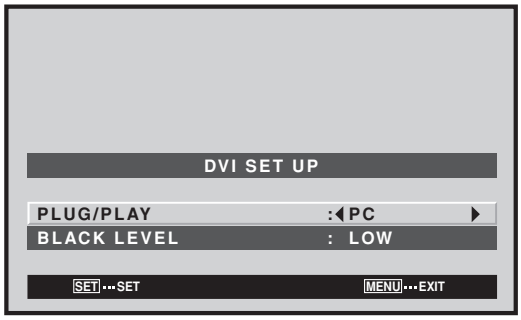


③ Place the cursor over 'PLUG/PLAY' and press the [◄/►] button to change the setting.
Each time a [◄/►] button is pressed, the setting changes as shown below.

PC ⇄ VIDEO*

* Applicable only when the video card is installed.

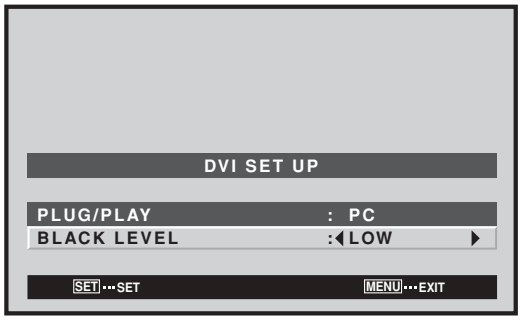
Screen ③



④ Place the cursor over 'BLACK LEVEL' then press the [◄/►] button to change the setting.
Each time the [◄/►] button is pressed, the setting changes as shown below.

LOW (0 to 255) ⇄ HIGH (16 to 235)

Screen ④



Note

When 'PLUG/PLAY' is set to 'VIDEO' then 'BLACK LEVEL' is set to 'HIGH'. However, there are devices that can adjust BLACK LEVEL so confirm the setting on the device.

11) Menu Language Display Setting

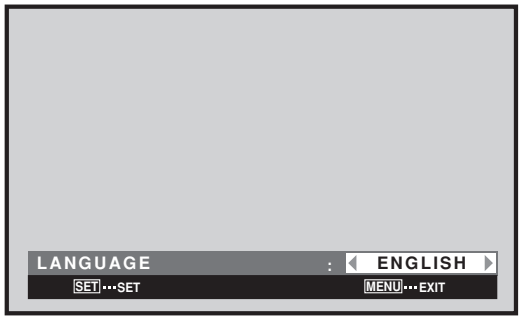
The factory setting for the menu display language is English. To change to another language it is necessary to change the setting.

Factory setting: ENGLISH

① Select 'OPTION'.

② Place the cursor over 'LANGUAGE' then press the [SET] button.

Screen ②

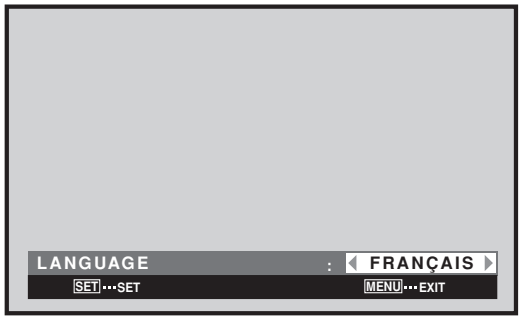


③ Each time a [◄/►] button is pressed, the language changes as shown below.

ENGLISH ⟷ FRANÇAIS ⟷ ESPAÑOL
日本語 ⟷ ITALIANO ⟷ DEUTSCH

With the desired language displayed, press the [SET] button.

Screen ③



Note

When the screen display language is set for either INPUT1 to INPUT5, the same display language is set for both inputs.

12) Energy Saving Setting

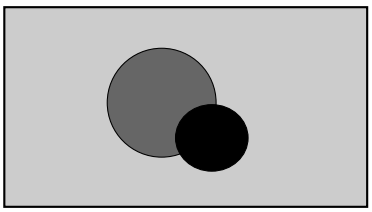
This is a function that reduces power consumption and reduces deterioration of the panel. This setting controls the brightness of the screen according to the input signal.

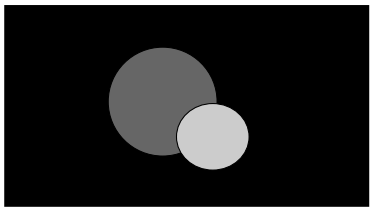
- To make the screen bright and easy to see: Set 'ENERGY SAVE: STANDARD1, STANDARD2 (STANDARD)*'.
- To perform control according to the brightness of the room and to adjust the screen according to the surroundings: Set 'ENERGY SAVE: AUTO'.
- To reduce power consumption: Set 'ENERGY SAVE: MODE1, MODE2'.
- To reduce deterioration of the panel such as burning: Set 'ENERGY SAVE: MODE 3'.
- To temporarily turn off the present screen display: Set 'ENERGY SAVE: MUTE' and press the MENU button. Image mute starts at the same time that the menu disappears.

Factory setting: STANDARD1 (STANDARD)*

Differences in video reproduction by energy saving settings (illustration)

For this kind of input signal

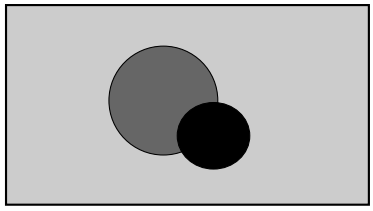


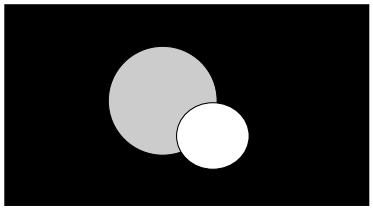


(As a standard)
When the white window is displayed, the peak brightness is decreased as shown below.

- MODE1: Decreased about 50%
- MODE2: Decreased about 60%
- MODE3: Decreased about 75%

STANDARD1, STANDARD2 (STANDARD)*

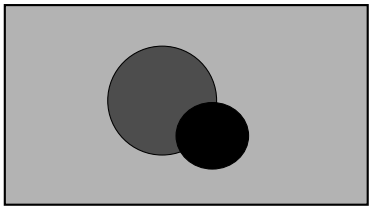


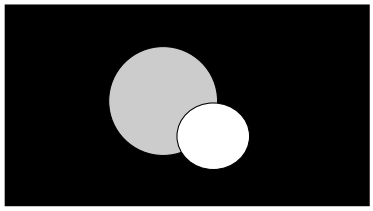


For an overall bright video, there is no change (Figure on the left).
For an overall dark video, the peak brightness is reproduced even brighter (Figure on the right).

AUTO The brightness is automatically changed within the STANDARD (bright) to MODE2 (dark) range according to the brightness of the room.

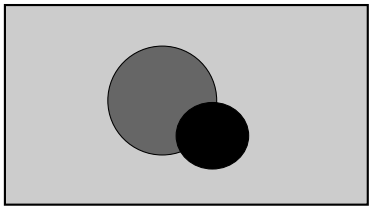
MODE1, MODE2

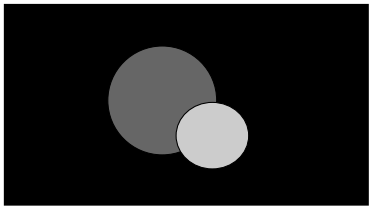




Power consumption is lowered by reducing the brightness of an overall bight video (Figure on the left).
Similar to in the STANDARD setting, an overall dark video is peak brightness is reproduced even brighter (Figure on the right).
The peak brightness in MODE2 is decreased by a set amount with respect to that in MODE1, however it is reproduced brighter than in MODE3.

MODE3





Input signal graduation is not controlled but reproduced accurately. Deterioration of the panel due to burning is reduced since the peak brightness of an overall dark video is not increased.

MUTE It temporarily shuts off the screen that is displayed.
To cancel MUTE, press the MENU button, INPUT button etc.

* PDP-427CMX

Note

The external sensor changes in stages; from an external light of 200 lux (rough value) to external light of 0 lux.

① Select 'OPTION'.

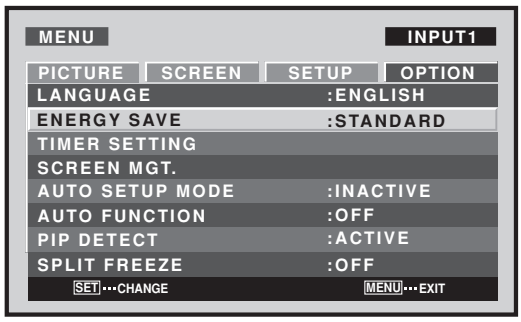
② Place the cursor over 'ENERGY SAVE' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

STANDARD1 → STANDARD2 (STANDARD)* → AUTO → MODE1 → MODE2 → MODE3 → MUTE →

*** PDP-427CMX**

The 'ENERGY SAVE' setting is common for all inputs.

Screen ②



13) Timer Setting

The present day of the week, time, and daylight savings time are set.

① Select 'OPTION'.

② Place the cursor on 'TIMER SETTING' then press the [SET] button.

③ Place the cursor on 'PRESENT TIME' then press the [SET] button.

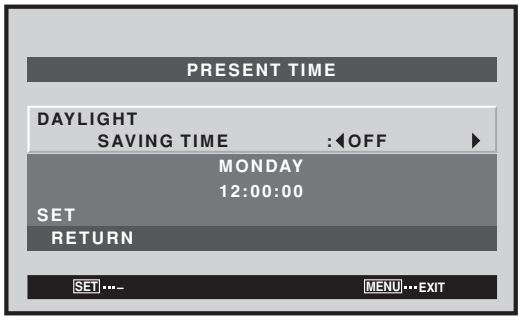
④ Adjust each item by pressing the ▲/▼/◄/► buttons.

DAYLIGHT SAVING TIME ..... sets daylight savings time
ON: Displays time as present time + one hour
OFF: Disables [DAYLIGHT SAVING TIME] mode
Week ..... Set current day of the week
Hour, Minute ..... Sets to current time.

Note

The set time may slow by approximately one minute per month from the actual time.

Screen ④



The 'TIMER SETTING' is set for all inputs.

14) Program/Repeat Timer Setting

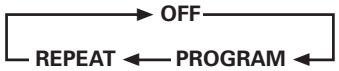
It can operate the preset PROGRAM TIMER and REPEAT TIMER.

Factory setting: OFF

① Select 'OPTION'.

② Place the cursor on 'TIMER SETTING' then press the [SET] button.

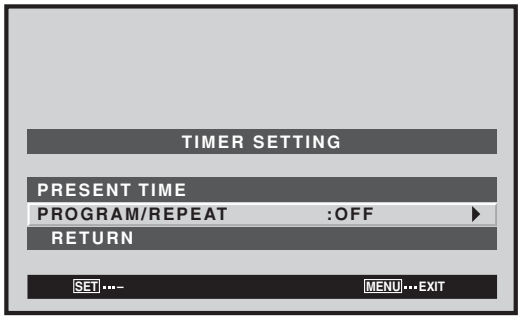
③ Change the setting by pressing the ◄/► buttons to move the cursor to the 'PROGRAM/REPEAT'.
Each time a ◄/► button is pressed, the setting changes as shown below.



Note

For the PROGRAM/REPEAT TIMER setting, refer to "Program Timer Setting (pg. 223)" and "Repeat Timer Setting (pg. 253)" in Integrator Mode.

Screen ③



15) Orbiter Setting

This function gradually moves the display position of the screen periodically screen position is moved at random, horizontally or vertically).

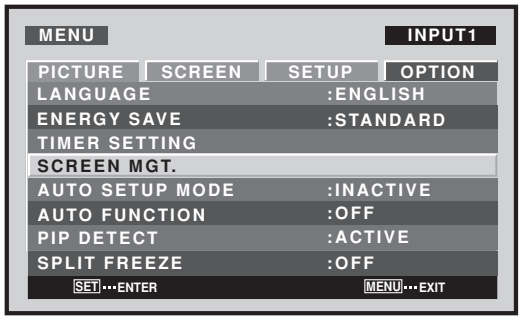
Setting 'MODE1' to 'MODE3' is effective in reducing screen burn when a still image is displayed.

Factory setting: OFF

① Select 'OPTION'.

② Place the cursor on 'SCREEN MGT.' then press the [SET] button.

Screen ②



② Place the cursor on 'ORBITER' then press the [◄/►] buttons to change the settings.

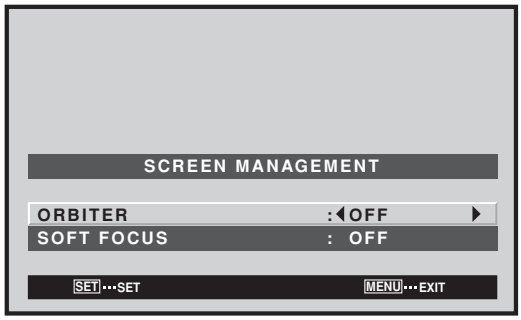
Each time a [◄/►] button is pressed, the setting changes as shown below.

MODE1 ..... The size is reduced so the picture is completely in the display area.

MODE2 ..... The size is increased so there are no black bands in the display area.

MODE3 ..... It is displayed at the same size.

Screen ③



Note

- When 'MODE1' or 'MODE2' has been set, it moves smoothly.
- In 'MODE3', it moves in dot units. The entire screen moves one dot horizontally or vertically approximately every minute. The maximum movement is four dots.
- When it is set to 'OFF', the orbiter of the PIP subscreen is ON.

The 'ORBITER' setting is common for all inputs.

16) Soft Focus Setting

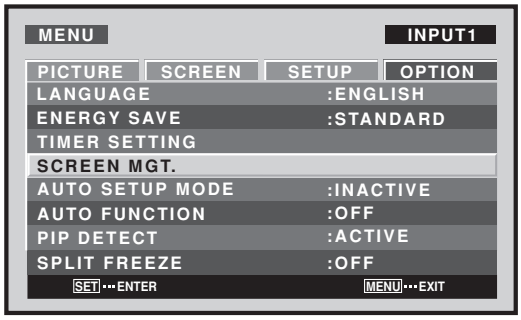
Images are softened by suppressing the edge contrast.

Factory setting: OFF

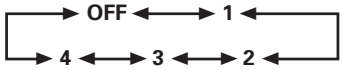
① Select 'OPTION'.

② Place the cursor on 'SCREEN MGT.' then press the [SET] button.

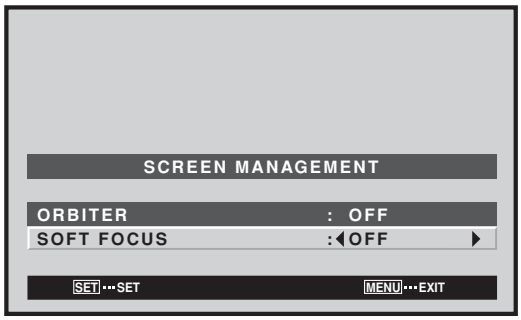
Screen ②



② Place the cursor on 'SOFT FOCUS' then press the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.



Screen ③



The 'SOFT FOCUS' setting is common for all inputs.

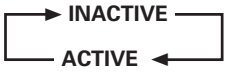
17) Auto Set Up Mode Setting

This function automatically adjusts the signal when the power is turned ON, when input is changed, and when the type of input signal is changed.

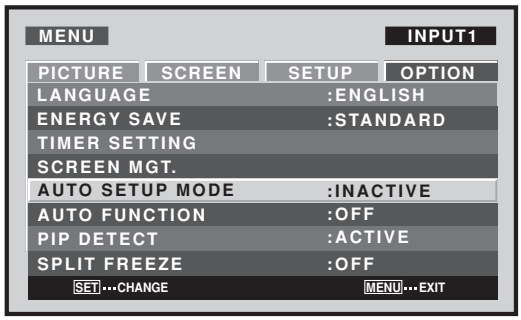
Factory setting: INACTIVE

① Select 'OPTION'.

② Place the cursor on 'AUTO SETUP MODE' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.



Screen ②



Note

- This setting is only effective when a PC signal is input to INPUT1 or INPUT5.
- Items one and three below are adjusted automatically.
  'SCREEN' Adjustment inside the menu: 1. 'POSITION'
  2. 'CLOCK'
  3. 'PHASE'
- The adjustment items are the same as when the 'AUTO SET UP' button is pressed on the remote control. However, the screen may be less precise. This difference in precision is due to short processing time in the AUTO SET UP MODE.
- It may not be possible to precisely adjust an input signal such as when the signal has low brightness. Set the AUTO SET UP MODE to INACTIVE then adjust as explained in the following section, 'SCREEN, CLOCK, PHASE'.
- When the AUTO SET UP MODE is set to ACTIVE and the 'SCREEN' is adjusted manually, 'AUTO SETUP MODE: ACTIVE' is displayed.
  This is to warn you that although adjustment is manual, when the input changes, or when the type of signal changes on the outside, the AUTO SET UP MODE functions and the adjusted values are overwritten.

18) Screen Position, Clock Frequency and Clock Phase Adjustment

In AUTO SET UP, the position and clock are optimally set. However, depending on the type of signal, adjustment may be off. In this situation, manually adjust the setting.

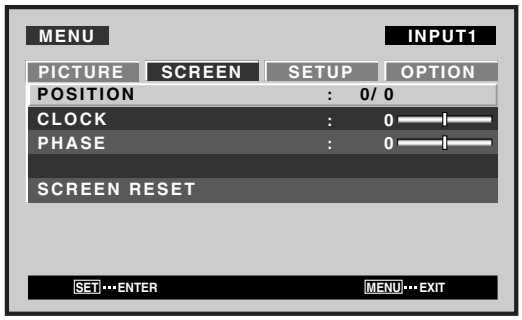
Example) When a PC signal is input to INPUT1 (1024 x 768)

① Set the screen size to 'DOT BY DOT'.

② Select 'SCREEN'.

③ Place the cursor on 'POSITION' then press the [SET] button.

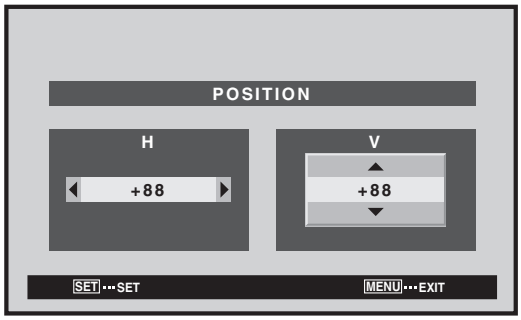
Screen ②



④ Use the [▲/▼] and [◄/►] buttons to adjust the screen position.
Here, the top and left side of the video display are properly set.

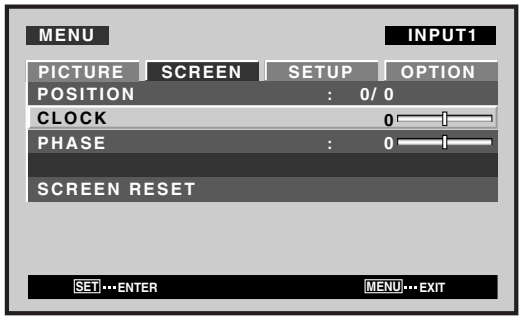
1. With the [▼] button, lower the display until the mask (black portion) protrudes into the top of the image.
2. With the [▲] button, move the display to the point where the mask at the top disappears.
3. With the [►] button, move the display until the mask (black portion) protrudes into the left side of the image.
4. With the [◄] button, move the display to the point where the mask on the left side disappears.

Screen ④



⑤ Place the cursor on 'CLOCK' then press the [SET] button.

Screen ⑤



⑥ Use the [◄/►] buttons to adjust the click frequency.
In step ④, the left side was aligned. Here the right side is aligned.

1. With the [►] button, move the display until the mask (black portion) protrudes into the right side of the image.
2. With the [◄] button, move the display to the point where the mask on the right side disappears.

Screen ⑥

⑦ In the adjustment in steps ⑤ and ⑥, the left side of the screen moves. With 'POSITION', accurately adjust the left side of the video display again.
As in step ④, used the [◄/►] buttons to align the left side.

⑧ In the adjustment in step ⑦, the right side of the screen moves. With 'CLOCK', adjust the right side again.
As in step ⑥, use the [◄/►] buttons to align the left side.
Repeat steps ⑦ and ⑧ until the adjustment value converges then adjust the 'PHASE'.
There are vertical lines, so it is easier to adjust the screen if the input signal has edges.

⑨ Place the cursor on 'PHASE' then press the [SET] button.

⑩ Using the [◄/►] buttons to adjust the clock phase.
Move the vertical edge of the image to the point where it becomes bold.

Adjustment is now complete.

19) Auto Function Mode Setting

With the Auto Function mode it is possible to automatically change the input when a signal is detected.

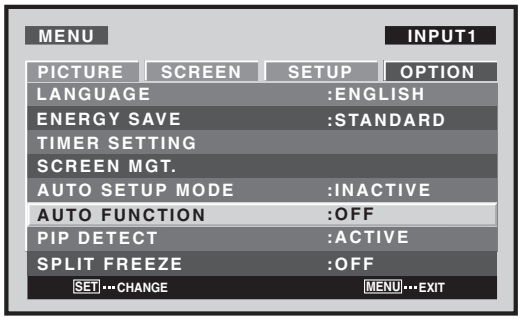
Factory setting: OFF

① Select 'OPTION'.

② Place the cursor over 'AUTO FUNCTION' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

- When INPUT1 or INPUT4 is selected, this function automatically switches to that input when the signal is detected. Also, in the Auto Function mode, after the input switches and the signal input stops, the Auto Function returns to the input that was used before the switch.

Screen ②



Note

- The Auto Function mode is unavailable when 'OFF' is selected.
- When SYNC ON G or a component signal is input to INPUT1, the Auto Function is unavailable.
- After the input has been switched in the Auto Function mode, press the [INPUT] button and select a different input. The Auto Function mode activates when it detects a change in the selected input signal (from a no-input state to an input state).
- When the power is turned OFF/ON, the Auto Function mode activates when the signal is input to the selected input.
- The Auto Function mode is unavailable when the Menu displays, during POINT ZOOM, or during multi-screen display.
- When the Auto Function mode is set to 'INPUT1' or 'INPUT4', 'AUTO' appears under the option that displays the selected input (INPUT1 to INPUT5).
- When a video card other than a PDA-5003/PDA-5004 is installed, the Auto Function mode does not function even when set to 'INPUT4'.

20) PIP DETECT Setting

During picture-in-picture display, if no subscreen input signal is detected then the black borders of the subscreen are automatically turned off.

The subscreen mode function is disabled during side-by-side display.

* The lack of a subscreen input signal means there is no video signal or sync signal.

Factory setting: ACTIVE

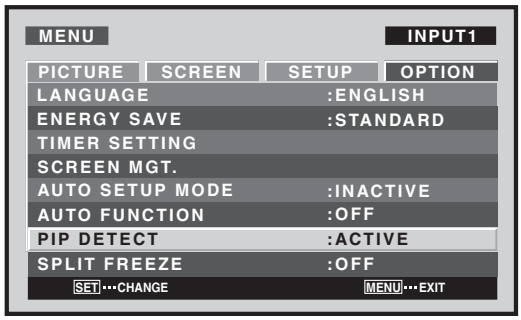
① Select 'OPTION'.

② Place the cursor on 'PIP DETECT' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

- ACTIVE ..... When no subscreen input signal is input, no subscreen is displayed. When the subscreen input is later restored, the subscreen is displayed again.
- INACTIVE .. When no subscreen signal is input, the black border is visible.

The 'PIP DETECT' setting is common for all inputs.

Screen ②



21) SPLIT FREEZE Setting

For setting other than [OFF], the image displayed when the FREEZE button is pressed is displayed in a subscreen as a freeze-frame image.

Factory setting: OFF

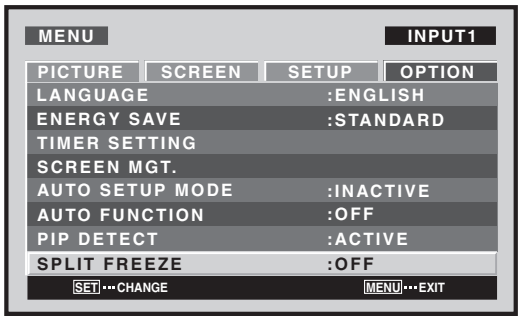
① Select 'OPTION'.

② Place the cursor on 'SPLIT FREEZE' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

OFF → S BY S → PIP

- OFF ..... The still picture displayed at the time the FREEZE button was pressed is displayed as a single fullscreen image
- S BY S ..... When the FREEZE button is pressed, the freeze-frame image is displayed in the side-by-side subscreen
- PIP ..... When the FREEZE button is pressed, the freeze-frame image is displayed in the picture-in-picture (left-bottom to left-top) subscreen.

Screen ②



The 'SPLIT FREEZE' setting is common for all inputs.

5.4 Integrator Mode

5.4.1 About the Integrator Mode

1) Entering the Integrator Mode
   - It is possible to set the integrator mode by the following procedure.

   ① Press the [DISPLAY] button to display 'DISPLAY CALL 1'.

   ② When 'DISPLAY CALL 1' is displayed, press the [DISPLAY] button again (for three seconds or more) to display 'DISPLAY CALL 2'.

   ③ It is possible to enter the integrator mode by pressing the [MENU] button when 'DISPLAY CALL 2' is displayed. At this time, press the [MENU] button briefly (the integrator mode cannot be entered if the [MENU] button is held down for a longer period of time).

2) After entering the integrator mode...
   - The adjustment values for COLOR TEMP, DNR, MPEG NR, CTI and PURECINEMA for the PICTURE, SCREEN and SETUP are all set to their initial values.
     The other SETUP and OPTION settings retain their set values.

3) Making adjustment in the integrator mode
   - The adjusted values (see section 5.4.3, "Adjustment and Setting in the Integrator Mode 1) to 3)" (pg. 216 to 218)) for PICTURE and SCREEN can be stored in memory for 8 types of input signals (input frequency) for each function. When a new ninth type of input signal is adjusted, the adjustment data for the oldest input signal is deleted.
   - For details, refer to section 5.4.4, "PICTURE, White Balance and SCREEN Position Adjustment Values Memory Area Tables" (pg. 257).

4) Exiting the integrator mode
   - Press the [MENU] button on the remote control or main-control panel to designate to the normal-operation mode.

5) Precautions
   (1) In the following cases the integrator mode is automatically cancelled and operation returns to the normal-operation mode:
      - When the input is switched
      - When there is no operation for three minutes

   (2) Adjustment and settings should be performed on the actual video signal to be used or on an adjustment signal having the same frequency.

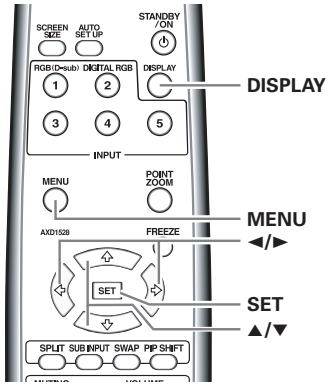
   (3) The method for entering the integrator mode for PDP-503CMX (pressing the [MENU] button in standby and then pressing the [POWER] button) is not supported.

   (4) Only English is supported in the integrator mode.

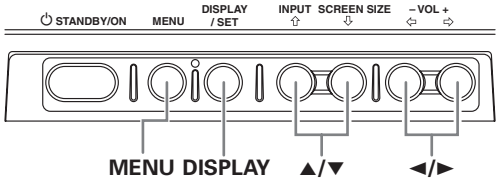
   (5) During Point Zoom operation or multi-screen display, 'DISPLAY CALL 1' is unavailable even if the [DISPLAY] button is pressed. After disengaging Point Zoom or multi-screen display, follow the instructions under 1) Entering the Integrator Mode.

5.4.2 Example of Integrator Mode Operation

The basic operation in the menu mode is explained using brightness adjustment as an example.



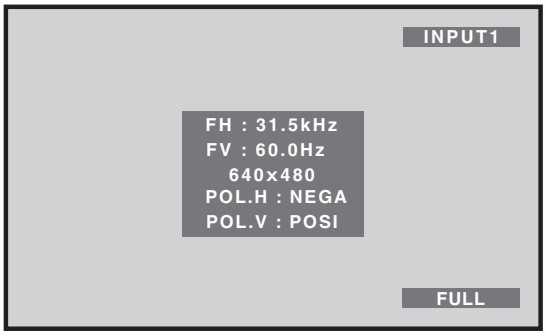
Remote control unit



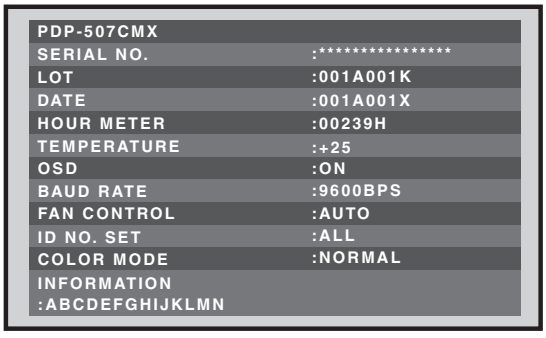
Main-control panel

1 **Set the device to normal operation then press the [INPUT] button to switch to the input to be adjusted.**

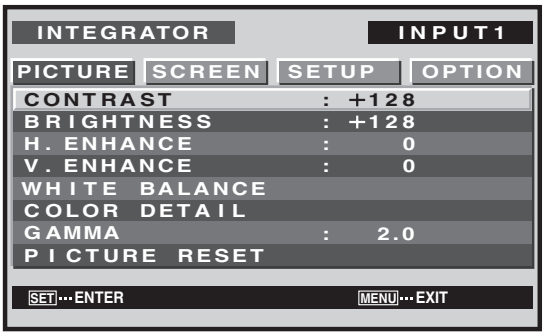
2 **Press the [DISPLAY] button on the remote control unit or the main-control panel to display 'DISPLAY CALL 1'.**



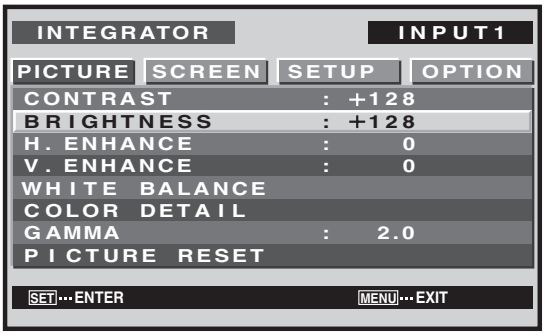
3 **Press the [DISPLAY] button on the remote control unit or the main-control panel (three seconds or more) when 'DISPLAY CALL 1' is displayed to display 'DISPLAY CALL 2'.**



4 **Press the [MENU] button on the remote control unit or the main-control panel when 'DISPLAY CALL 2' is displayed to open up the integrator mode screen.**



5 **Press the [▲/▼] buttons on the remote control unit or the main-control panel to select 'BRIGHTNESS' then press the [SET] button.**



6 **Press the [◄/►] buttons on the remote control unit or the main-control panel to adjust to the desired picture.**

It is possible to move to other adjustment items with the ▲/▼ buttons.

7 **Press the [SET] button on the remote control unit or the main-control panel.**
The adjusted value is saved in memory then operation returns to the screen in step 5.
To continue with adjusting another item, repeat steps 5 to 6.

8 **When adjustment is complete, press the [MENU] button on the remote control unit or the main-control panel button to return to the normal screen.**

5.4.3 Adjustment and Setting in the Integrator Mode

For details about button controls, refer to section 5.4.2, "Example of Integrator Mode Operation" (pg. 215).

1) PICTURE Adjustment

The adjustable items shown below are a little different than in the menu mode's PICTURE adjustment (refer to the instruction manual).

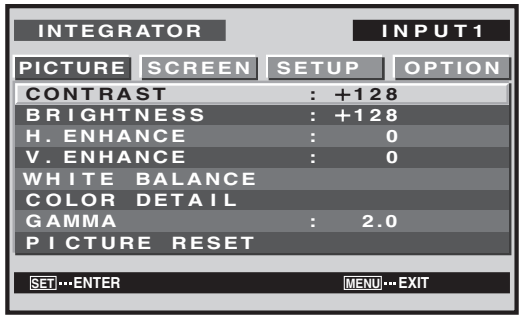
- PC input
  CONTRAST, BRIGHTNESS, H. ENHANCE, V. ENHANCE, etc.
- Video input ★ (Applicable only when a PDA-5003 or PDA-5004 is installed.)
  CONTRAST, BRIGHTNESS, COLOR, TINT, SHARPNESS, etc.

For details, refer to section 5.1.4, "List of Adjustable and Settable Items" (pg. 162).

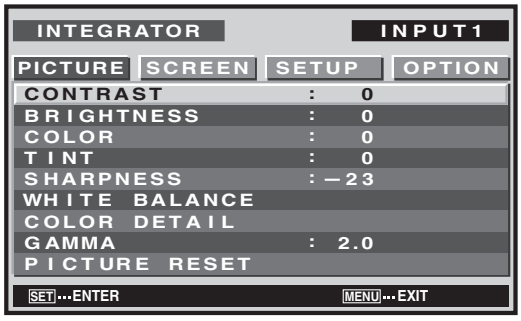
① After switching to the input (INPUT1 to INPUT5) to be adjusted, enter the integrator mode.

Select 'PICTURE'.

Screen ①-1
For PC signal input



For video signal input
(Applicable only when a PDA-5003/PDA-5004 is installed.)



② Perform adjustment.

Note

When there is PC signal input at INPUT1, 2, and 5, 'COLOR', 'TINT' and 'SHARPNESS' are unavailable.
When there is video input, 'H. ENHANCE' and 'V. ENHANCE' are unavailable.

Use the [▲/▼] buttons on the remote control or the main-control panel.

Perform adjustment using the [◄/►] buttons on the remote control or the main-control panel to change settings.

It is possible to move to another item for adjustment using the [▲/▼] buttons.

Screen ②

The value adjusted here becomes the center value for adjustment in the menu mode.

Press the [SET] button to return to screen ①-1 or screen ②-2.
For details about the adjustable range, refer to section 5.1.4, "List of Adjustable and Settable Items" (pg. 162).

2) WHITE BALANCE Adjustment

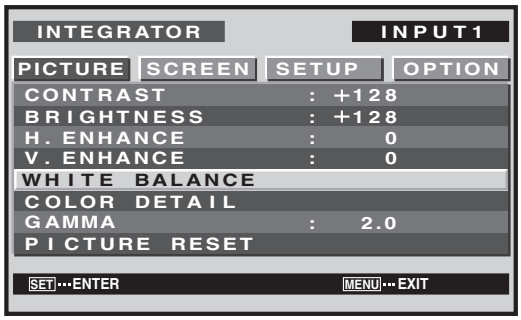
The adjustable items are R. HIGH, G. HIGH, B. HIGH, R. LOW, G. LOW and B. LOW.

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

Select 'PICTURE'.

② Place the cursor on 'WHITE BALANCE' then press the [SET] button.

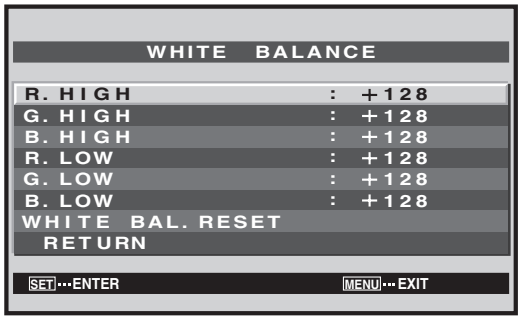
Screen ①



③ Use the [▲/▼] buttons to switch between items.

In screen ③, when 'YES' is selected for 'WHITE BAL. RESET', all of the WHITE BALANCE adjustment values return to the factory settings.

Screen ③



④ Use the [◄/►] buttons to change a setting.

It is possible to move to another item for adjustment using the [▲/▼] buttons.

Press the [SET] button to return to screen ③.

<Adjustable range> Each item: 0 to 255

Screen ③

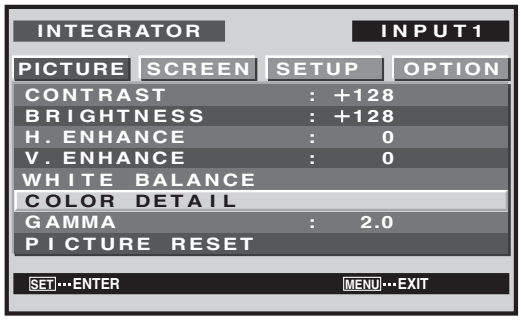
3) COLOR DETAIL setting

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'PICTURE'.

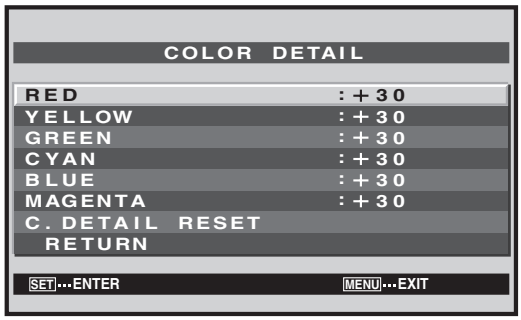
③ Place the cursor on 'COLOR DETAIL' then press the [SET] button.

Screen ③



④ Use the [▲/▼] buttons to switch between items.

Screen ④



⑤ Adjustment is performed using the [◄/►] buttons.

C. DETAIL can be adjusted for each color.

- C. DETAIL RED: The + side approaches magenta, and the – side approaches yellow.
- C. DETAIL YELLOW: The + side approaches red, and the – side approaches green.
- C. DETAIL GREEN: The + side approaches yellow, and the – side approaches cyan.
- C. DETAIL CYAN: The + side approaches green, and the – side approaches blue.
- C. DETAIL BLUE: The + side approaches cyan, and the – side approaches magenta.
- C. DETAIL MAGENTA: The + side approaches blue, and the – side approaches red.

It is possible to move to another item for adjustment using the [▲/▼] buttons.

Press the [SET] button to return to screen ③.

Screen ⑤

4) GAMMA Setting

This function sets the GAMMA characteristics for the video.

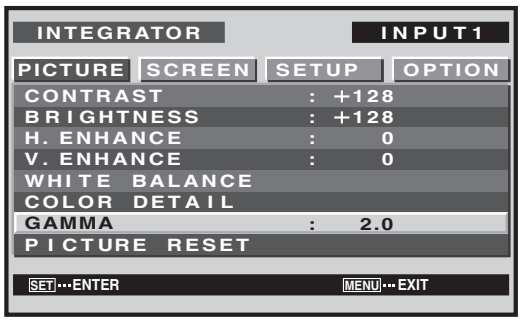
Factory setting: GAMMA 2.2

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

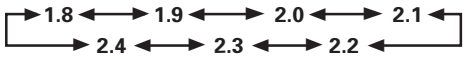
② Select 'PICTURE'.

③ Place the cursor on 'GAMMA' then press the [SET] button.

Screen ③



④ Press the [◄/►] buttons to change the setting.
Each time a [◄/►] button is pressed, the setting changes as shown below.



Press the [SET] button to return to screen ③.

Screen ④

Note

- The GAMMA value is set based on Pioneer's measurement standards.
- After adjusting the WHITE BALANCE, the WHITE BALANCE is not lost even when the GAMMA setting is changed.

5) SCREEN (Screen Position) Adjustment

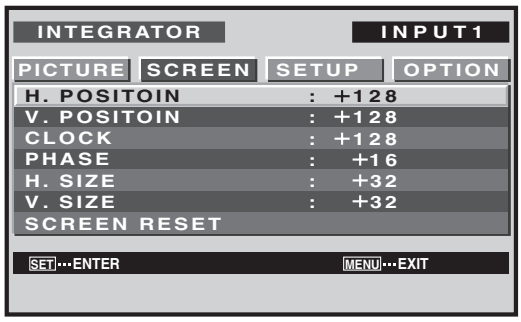
The adjustable items are H. POSITION, V. POSITION, CLOCK, PHASE, H. SIZE and V. SIZE.

① Enter the integrator mode then switch to the input (INPUT1 to INPUT5) to be adjusted.

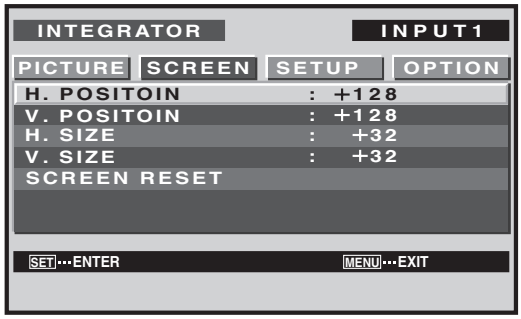
② Select 'SCREEN' then select the item to adjust.

In screen ②, when 'YES' is selected for the 'SCREEN RESET', all SCREEN values return to the factory settings.

Screen ②
For PC signal input



For video signal input
(Applicable only when a PDA-5003/PDA-5004 is installed.)



③ Perform the adjustment.

Note

'CLOCK' and 'PHASE' can be adjusted when there is PC signal input.

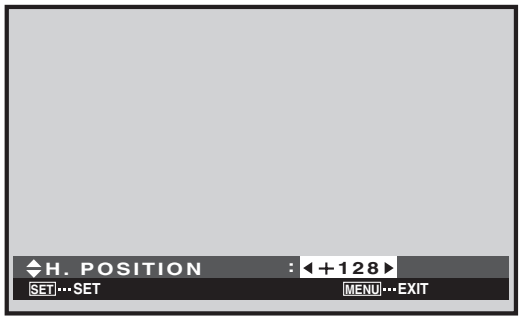
Use the [▲/▼] buttons on the remote control or the main-control panel to select a different item.

Use the [◄/►] buttons on the remote control or the main-control panel to change settings.

The values adjusted here become the menu mode's initial values.

Press the [SET] button to return to screen ②.

Screen ③



<Adjustable Range>
H. POSITION, V. POSITION when there is PC signal input: 0 to 255 (initial value: 128)
H. POSITION, V. POSITION when there is video signal input: 0 to 127 (initial value: 64) (When a PDA-5003/PDA-5004 is used.)
H. SIZE, V. SIZE: 0 to 63 (initial value: 0)
CLOCK: 0 to 255 (initial value: 128)
PHASE: 0 to 31 (initial value: 16)

<Adjustment Order>
Performing adjustment in the following order is effective.
V. POSITION ⇨ H. POSITION ⇨ CLOCK ⇨ H. POSITION ⇨ CLOCK ⇨ PHASE

6) Brightness Enhancement (BRT. ENHANCE) Setting at the Center of the Screen

This function improves and enhances the brightness of the center of the screen.

- When emphasizing the brightness of the screen: Set to ON.
- When emphasizing uniformity of the screen: Set to OFF.

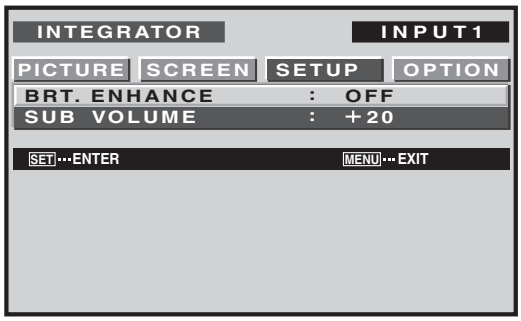
Factory setting: OFF

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'SETUP'.

③ Place the cursor on 'BRT. ENHANCE' then press the [SET] button.

Screen ③



④ Each time a [◄/►] button is pressed, the setting changes as shown below.

Perform the BRT. ENHANCE setting for each input (INPUT1 to INPUT5).
Also, perform the setting for both PC and video signals.

After setting is complete, press the [SET] button to return to screen ③.

Screen ④

Note

During video wall, the BRT. ENHANCE function is unavailable, however, settings can still be changed.

7) SUB VOLUME Setting

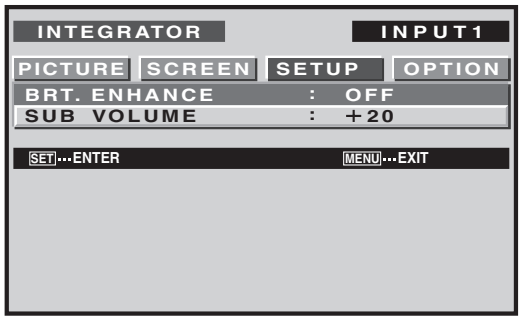
This item is for adjusting the audio input level for each input.
This is useful when adjusting the level between different sources, for example a DVD player and a PC.
After muting the audio before hand, enter the integrator mode and perform the adjustment.

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'SETUP'.

③ Place the cursor on 'SUB VOLUME' then press the [SET] button.

Screen ③



④ Perform the adjustment.

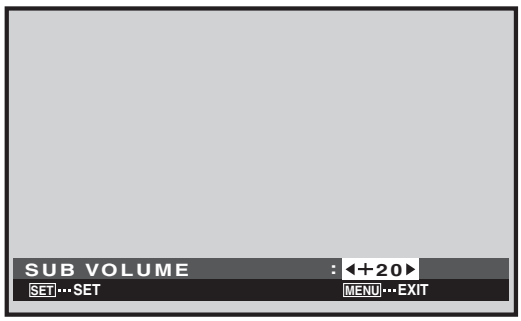
Use the [◄/►] buttons on the remote control or the main-control panel to change settings.

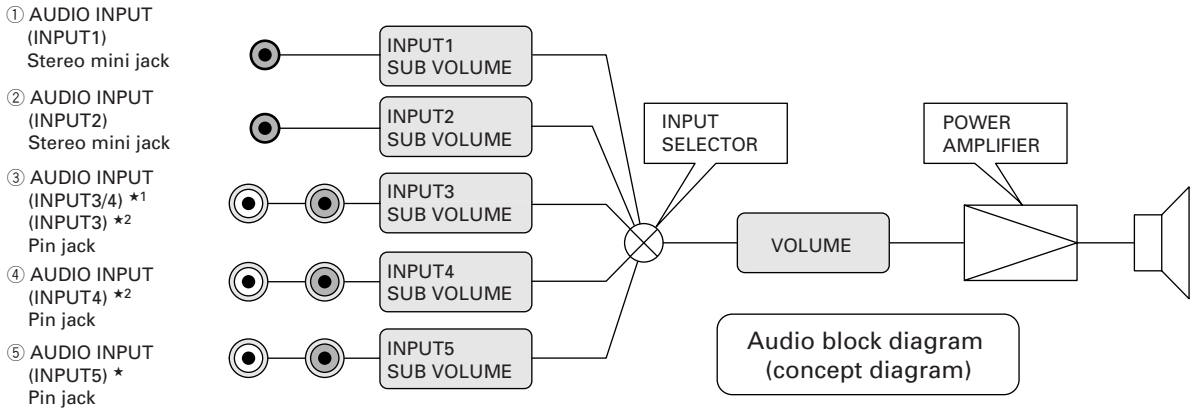
Press the [SET] button to return to screen ③.

<Adjustable Range>
Each item: 0 to 20 (initial value: 20)

<Adjustment Order>
Performing adjustment in the following order is effective.
1. VOLUME (normal-operation mode): Raise the volume to the actual operating condition.
2. SUB VOLUME (integrator mode): Adjust the input with high volume to match the input with low volume.

Screen ④




① AUDIO INPUT (INPUT1) Stereo mini jack
② AUDIO INPUT (INPUT2) Stereo mini jack
③ AUDIO INPUT (INPUT3/4) ★1 (INPUT3) ★2 Pin jack
④ AUDIO INPUT (INPUT4) ★2 Pin jack
⑤ AUDIO INPUT (INPUT5) ★ Pin jack
INPUT1 SUB VOLUME
INPUT2 SUB VOLUME
INPUT3 SUB VOLUME
INPUT4 SUB VOLUME
INPUT5 SUB VOLUME
INPUT SELECTOR
VOLUME
POWER AMPLIFIER

Audio block diagram (concept diagram)

★ : Applicable only when a PDA-5003/PDA-5004 is installed.
★1: Applicable only when a PDA-5003 is installed.
★2: Applicable only when a PDA-5004 is installed.

8) Program Timer Setting

This option can set the day of the week, time, input, and function desired when the power is turned ON/OFF.

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

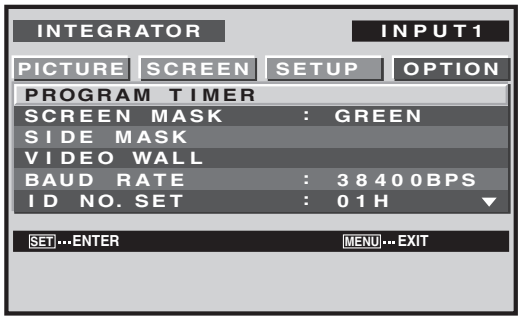
② Select 'OPTION'.

③ Place the cursor on 'PROGRAM TIMER' then press the [SET] button.

Note

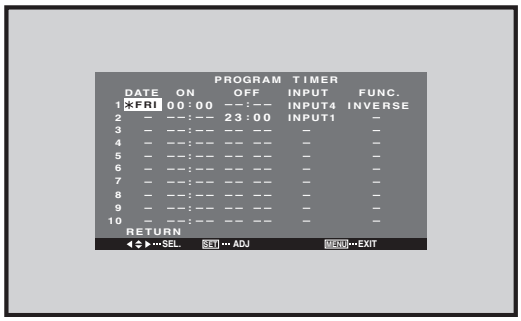
To set REP.1 to REP.3, press the [►] button. For the setting method, see "REPEAT TIMER Setting (pg. 253)". The contents of the setting are reflected individually in REP. 1 to 3 in this page and in REPEAT TIMER in pg. 253, so be careful about this point.

Screen ③



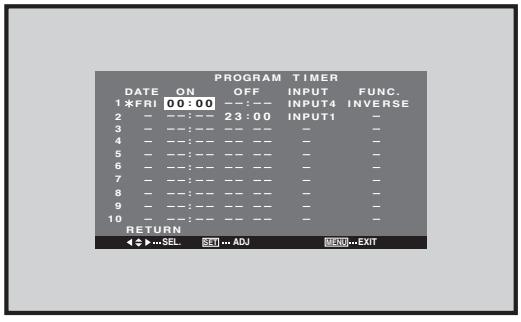
④ Select the item to be set with the [▲/▼/◄/►] buttons then press the [SET] button.

Screen ④



⑤ Change the setting with the [▲/▼/◄/►] buttons then press the [SET] button.

Screen ⑤



■ Program timer settings

DATE ..... Sets the day of the week the program timer will be executed. It can be set as "every day" or as "every Friday"
ON ..... Sets the power ON time
OFF ..... Sets the power OFF time
INPUT ..... Sets the input when the power is turned on.
FUNC. ..... Sets the function that will be executed when the power is turned ON
ORB. ..... Sets the Orbiter
INV. ..... Displays inverted
REP.1 ..... Sets the REPEAT 1 input mode.
REP.2 ..... Sets the REPEAT 2 input mode.
REP.3 ..... Sets the REPEAT 3 input mode.

■ To reset the program;

Press the [CLEAR] button with the cursor on DATE. This resets the program.

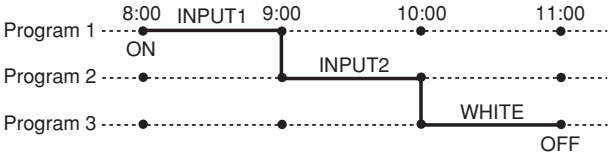
■ To clear the set contents;

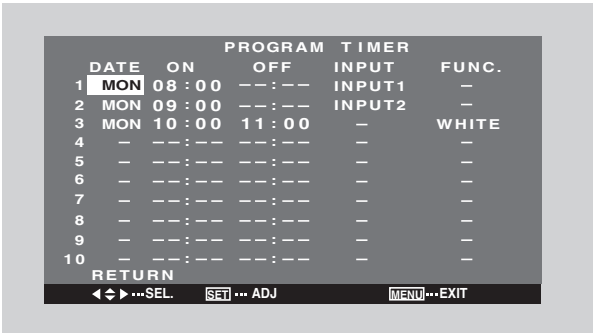
Press the [CLEAR] button with the cursor on ON, OFF, INPUT, FUNCTION. This clears the item's contents.

■ **Viewing the program timer screen**

- "∗" in the DATE column
  This indicates "every". When there is only "∗" in the DATE column, it means "every day", while "*FRI" means "every Friday".
- ON, OFF column "–"
  The hour and minute must be set for this option to function.
- INPUT, FUNCTION column "–"
  It displays the "last" (state when the power is off) setting.

Example: At 8:00 AM on Monday, turn on the power and display the input from INPUT1, then at 9:00 AM, display the input from INPUT2, at 10;00AM, display white, and turn off the power at 11:00 AM.




PROGRAM TIMER
DATE ON OFF INPUT FUNC.
1 MON 08:00 --:-- INPUT1 –
2 MON 09:00 --:-- INPUT2 –
3 MON 10:00 11:00 – WHITE
4 – --:-- --:-- – –
5 – --:-- --:-- – –
6 – --:-- --:-- – –
7 – --:-- --:-- – –
8 – --:-- --:-- – –
9 – --:-- --:-- – –
10 – --:-- --:-- – –
RETURN
◄▲▼►...SEL. SET ... ADJ MENU...EXIT

To execute the program that has continued, set the time that you want it to turn off for only the final item.

Note

The set time may slow by approximately one minute per month.

The 'PROGRAM TIMER' setting is common for all inputs.
When the program timer power has been turned ON, "POWER ON MODE" is unavailable.

9) SCREEN MASK Setting

This function displays the inverse of the normal picture on the entire screen, or displays a single color such as white, red, green, blue or yellow according to an internal signal in the Plasma Display.
When setting something other than 'OFF' or 'INVERSE' it is not possible to display a signal input.
When the screen has been burned, this function may be used as an emergency measure for relieving the problem (It is not possible to completely remove the burning).
For details, refer to section 5.6, "Screen Burning" (pg. 283).

Factory setting: OFF

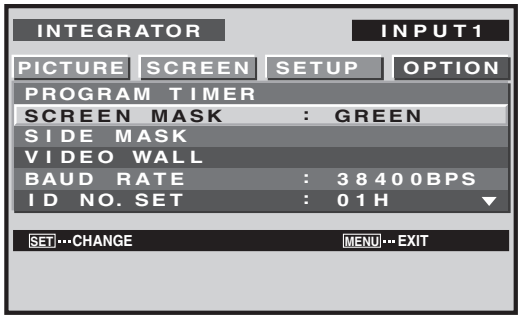
① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

③ Place the cursor on 'SCREEN MASK' then press the [SET] button to change the setting.

Each time the [SET] button is pressed, the setting changes as shown below.

Screen ③



OFF: The normal display appears.
INVERSE: The RGB levels of the display are reversed with respect to the normal display.
WHITE, RED, GREEN, BLUE, YELLOW: Only the selected color is displayed.

Note

In a mode other than OFF, operation is performed after the OSD display ends.

The 'SCREEN MASK' setting is common for all inputs.

10) SIDE MASK Setting

This mode is for adjusting the brightness of the no-image section around the screen when the screen size is '4:3' etc. When performing adjustments, pay attention to the brightness balance between the displayed signal and that of the adjacent sets.

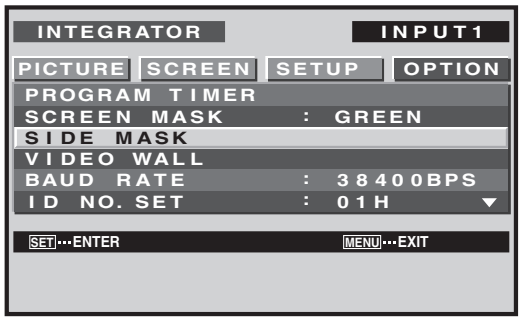
Factory setting: R. LEVEL, G. LEVEL, B. LEVEL 80
AUTO SIDE MASK ..... OFF

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

③ Place the cursor on 'SIDE MASK' then press the [SET] button.

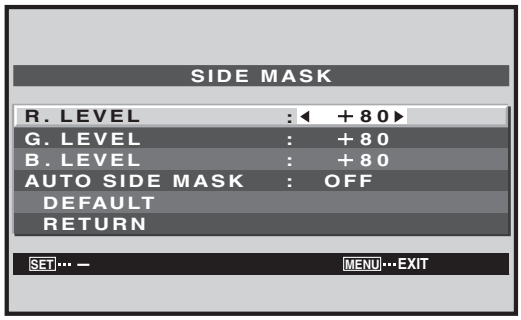
Screen ③



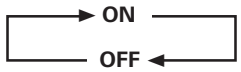
④ Place the cursor on a level (R. LEVEL, G. LEVEL, B. LEVEL) then adjust the setting using the [◄/►] buttons.

<Adjustable Range>
Each item: 0 to 255 (initial value: 80)

Screen ④

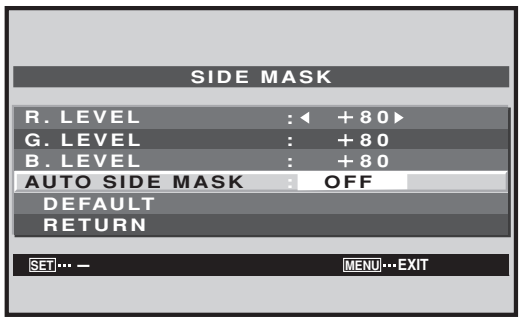


⑤ Change the setting by pressing the [◄/►] buttons to move the cursor to the 'AUTO SIDE MASK'.
Each time a [◄/►] button is pressed, the setting changes as shown below.



ON ..... To reduce burning when a black band appears at both edges of a 4:3 image displayed on a 16:9 screen, a preset side mask is displayed.
OFF ..... It does not operate.

Screen ⑤

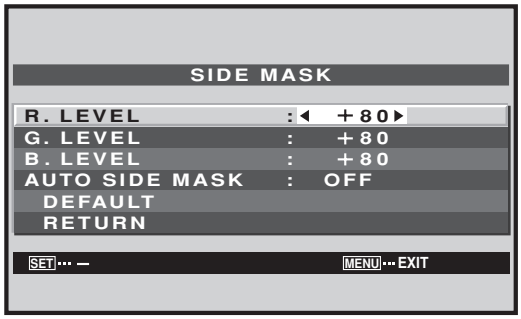


Note

- It is only effective during one screen display.
- It is only effective during INPUT2 and INPUT5 color signal.
- Compatible signals: 1080i, 720p, 1080p
- It takes about five seconds until display starts. If it is a dark image, it may take even longer.
- As the black band on a 16/9 screen disappears, the preset side mask also disappears.
- This function does not operate for patterned or for colored bands.

⑥ Place the cursor on 'DEFAULT' then press the [SET] button to return to the factory setting.

Screen ⑥



The 'SIDE MASK' settings are common for all inputs.

11) VIDEO WALL Setting

Use this feature to configure a four panel to 25-panel video wall.

Note

This setting is adjusted when the screen size is full display.
It is not correctly displayed in other screen sizes. (See pg. 161)

Factory setting:
- DIVIDER ..... OFF
- POSITION ..... –
- TYPE ..... NORMAL
- AUTO ID ..... OFF
- P.ON DELAY ..... OFF
- ABL LINK ..... OFF

[Setting Method]

■ Setting the ID NO. SET

Refer to "13) Assigning an ID" (pg. 233)

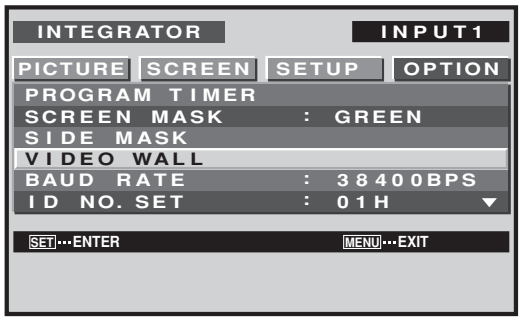
■ Setting the screen divider

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

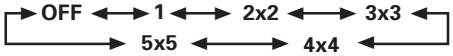
③ Place the cursor on 'VIDEO WALL' then press the [SET] button.

Screen ③



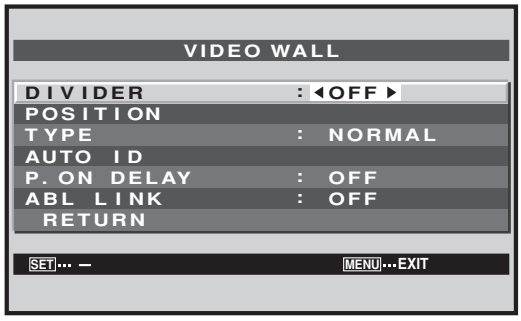
④ Place the cursor on 'DIVIDER'.

⑤ Press the [◄/►] buttons then press the [SET] button to change the settings.
Each time the [◄/►] buttons are pressed, the setting changes as shown below.



OFF, 1 ..... Screen division is not performed. Set it to '1' to set an ABL link without dividing the screen.
2x2 ..... Four panel video wall
3x3 ..... Nine panel video wall
4x4 ..... 16-panel video wall
5x5 ..... 25-panel video wall

Screen ④, ⑤



Note

- When four to 25 screens have been selected, set POSITION.
- When a problem occurs while programming the video wall settings, externally power down the video wall panels.

■ Setting the position

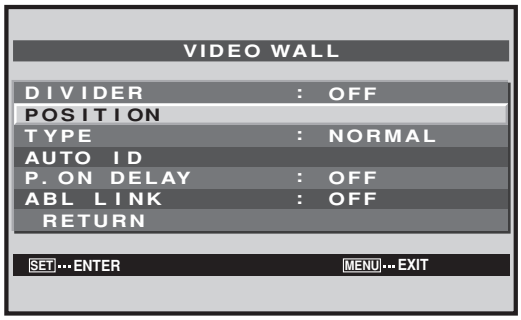
The POSITION is where a particular panel resides in the video wall.

⑥ Place the cursor on 'POSITION' then press the [SET] button.

Note

Set 'DIVIDER' at other than 'OFF' and '1'.

Screen ⑥



⑦ Use the [◄/►] buttons to change the settings.

[Setting the POSITION]

- When the screen is divided, the Video Wall option is unavailable.
- ID positions for four panels

NO.1	NO.2
NO.4	NO.3

- ID positions for nine panels

NO.1	NO.2	NO.3
NO.4	NO.5	NO.6
NO.7	NO.8	NO.9

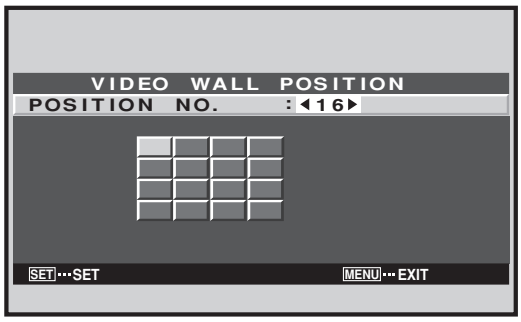
- ID positions for 16 panels

NO.1	NO.2	NO.3	NO.4
NO.5	NO.6	NO.7	NO.8
NO.9	NO.10	NO.11	NO.12
NO.13	NO.14	NO.15	NO.16

- ID positions for 25 panels

NO.1	NO.2	NO.3	NO.4	NO.5
NO.6	NO.7	NO.8	NO.9	NO.10
NO.11	NO.12	NO.13	NO.14	NO.15
NO.16	NO.17	NO.18	NO.19	NO.20
NO.21	NO.22	NO.23	NO.24	NO.25

Screen ⑦



■ Setting the display mode

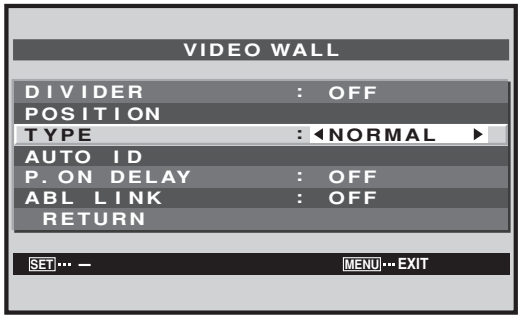
⑧ Place the cursor on 'TYPE' then press the [◄/►] buttons to change the settings.

Each time a [◄/►] button is pressed, the setting changes as shown below.

NORMAL ..... It expands the video image without correcting the displacement of the part where the displays are combined.

ADJUSTED ... It expands the video image by correcting the displacement of the part where the displays are combined.

Screen ⑧

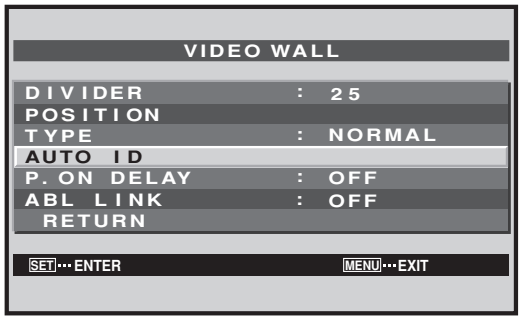


■ Setting AUTO ID

When 'ON' is set, the ID for each of the multiple displays linked by the remote control cable is set automatically.

⑨ Place the cursor on 'AUTO ID' then press the [SET] button.

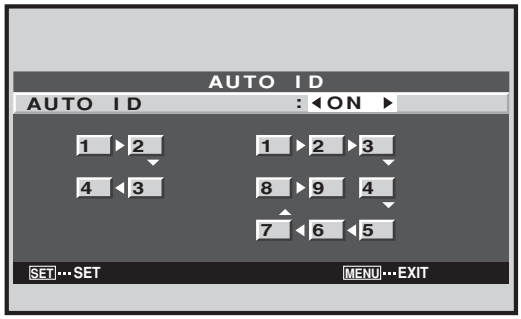
Screen ⑨



⑩ Press the [◄/►] buttons to change the settings.

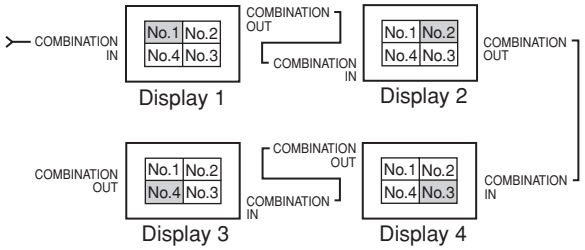
⑪ Press the [SET] button.

Screen ⑩, ⑪



[Setting the AUTO ID]

ON ..... The AUTO ID function operates
In the case of the four screen configuration, shown below, Display1 = ID1 and Display 4 = ID4.
Auto ID is only available for four screen/nine screen Video Walls.



OFF ..... The AUTO ID function does not operate.

Note

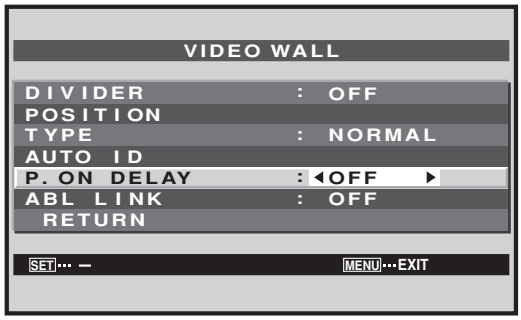
To execute AUTO ID, be sure to set ID NO. SET in OPTION to a setting other than ALL.

■ Setting the POWER ON DELAY

This option sets the power ON timing for the panels that make up a video wall to avoid a power surge.

⑫ Place the cursor on 'P.ON DELAY' and press the [◄/►] buttons to change the settings.

Screen ⑫



[Setting the POWER ON DELAY]

(When one, four, and nine screen Video Walls)

ON ..... Turns on the power approximately every second.

OFF ..... When the power is turned on, the power of all the displays turns on at the same time.

Note

- This function is effective when the AUTO ID setting is 'ON'. Set the AUTO ID in advance.
- After setting this function, turning on the power to the first display causes the other units to turn on in succession.
- From the second display, it is not possible to turn on the power using the remote control or control panel. To forcibly turn a panel on, press and hold the remote control's STANDBY/ON button for three or more seconds.

(When 16 and 25 screen Video Walls)

OFF → MODE1 (after approx. one second)* → MODE2 (after approx. two seconds)*

* The seconds shown above are yardstick targets; errors may occur.

Shift and set the power on timing by grouping OFF, MODE1, and MODE2.

■ Setting the ABL LINK

This option synchronizes the screen brightness on the multiple displays that form a Video Wall.

Apply the AUTO ID function the select a screen divider option (other than OFF).

⑬ Place the cursor on 'ABL LINK' then press the [◄/►] buttons to change the settings.

Each time a [◄/►] button is pressed, the setting changes as shown below.

[Setting the ABL LINK]

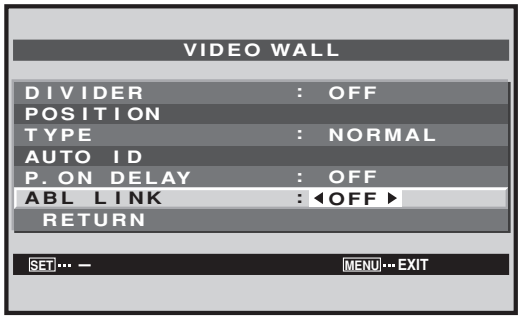
ON ..... Brightness of each screen on the video wall is the same (available for four panel and nine panel video walls only).

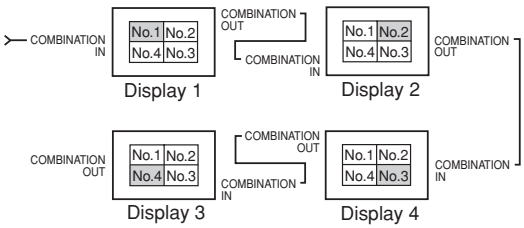
OFF ..... Brightness of the screens depends on the setting of each display.

[Connecting four displays]

When this option is 'ON', connect the four displays according to the POSITION sequence numbers in the figure on the right with the combination cable (Mini-DIN, 6 pin). If the screen division or POSITION has changed, the ABL link automatically turns off.

Screen ⑬





Note

- Connect in the same way for a nine panel video wall.
- In case of a 16 or 25 panel video wall, it is recommended that it be used with the power saving setting for the entire screen changed to MODE1.

The 'VIDEO WALL' settings are common for all inputs.

12) BAUD RATE Setting

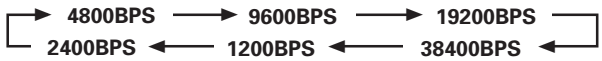
It is possible to switch the RS-232C transmission speed (baud rate) when controlling or adjusting the display using a PC. The baud rate can be set to 1200 bps, 2400 bps, 4800 bps, 9600 bps, 19200 bps, or 38400 bps.

Factory setting: 9600 bps

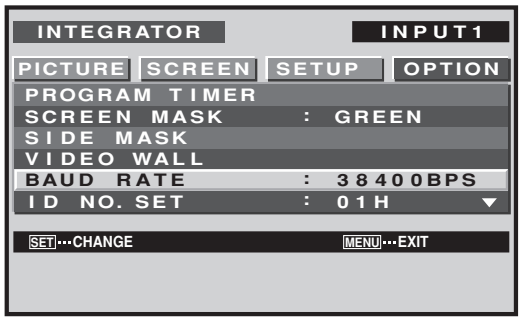
① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

③ Place the cursor on 'BAUD RATE' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.



Screen ③



The 'BAUD RATE' setting is common for all inputs.

Set the baud rate of the display so that it matches the baud rate of the PC.
Also, if the RS-232C cable must extend over a long distance, lower the baud rate.

13) Assigning an ID

This option assigns the ID necessary to adjust only the designated display in a video wall or to make an adjustment using an RS-232C command. For details see "5.5 RS-232C Adjustment" (pg. 262).

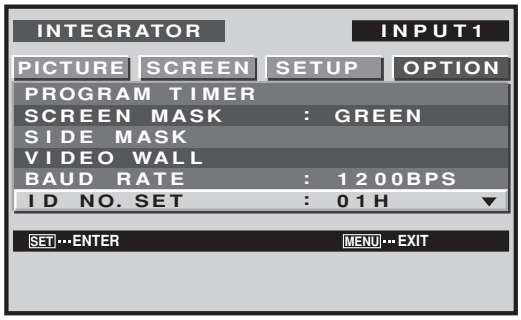
Factory setting: ALL

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

③ Place the cursor on 'ID NO. SET' then press the [SET] button.

Screen ③



④ Press the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.

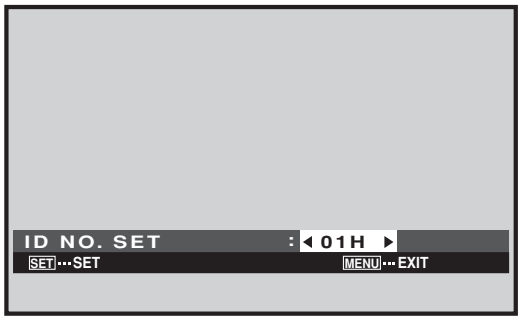
ALL ◄⟷► 01H to FFH

ALL ..... ID number cannot be set so the panel can be operated from all remote controls.

01H to FFH ... The ID number is set to the designated number.
Display ID numbers may match the ID number that is displayed when the remote control's ID NO. SET button is pressed. The remote control's [ID NO. SET], [CLEAR] buttons are operational.

Press the [SET] button to return to screen ③.

Screen ④



The 'ID NO. SET' settings are common for all inputs.

■ The Remote Control ID

When several Plasma Displays are installed at a single location, it is possible to operate only specified Plasma Displays with the remote control. Set the following options:

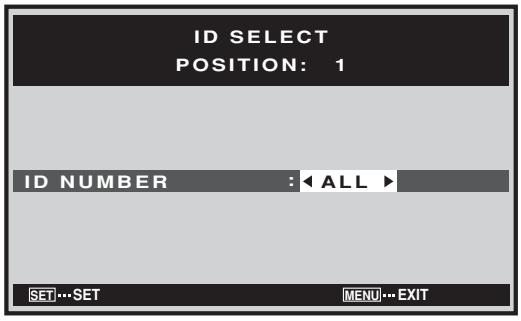
Factory setting: ALL

① Register panel ID numbers through the integrator menu.

② Separately register the ID numbers for remote control use with the [ID NO. SET] button on the remote control.
Press the [ID NO. SET] button to display screen ②.
Each time a [◄/►] button is pressed, the setting changes as shown below.

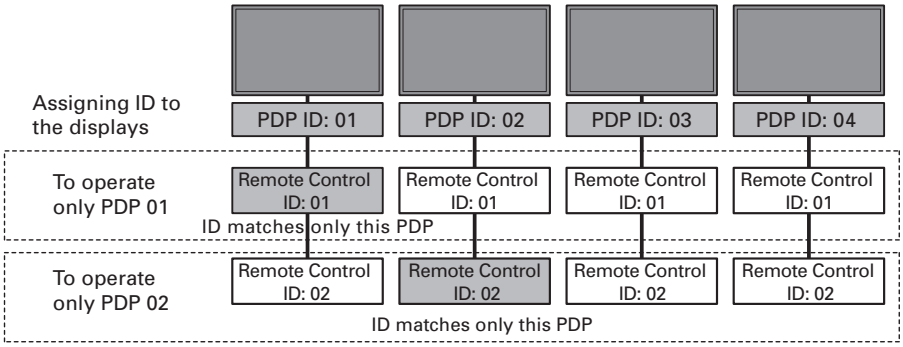
ALL ◄⟷► 01H to FFH

Screen ②



Note

- If the Remote Control does not work, display screen ②. Then press [CLEAR] button, the setting back 'ALL'.
- This function does not assign an ID number to the remote control; it assigns two kinds of panel IDs (Plasma Display use and remote control use) to control each unit by combining these two IDs.


Assigning ID to the displays
PDP ID: 01
PDP ID: 02
PDP ID: 03
PDP ID: 04
To operate only PDP 01
Remote Control ID: 01
Remote Control ID: 01
Remote Control ID: 01
Remote Control ID: 01
ID matches only this PDP
To operate only PDP 02
Remote Control ID: 02
Remote Control ID: 02
Remote Control ID: 02
Remote Control ID: 02
ID matches only this PDP

14) Cooling Fan Control Setting

A cooling fan is located on the rear surface of the display.

This function switches the method for controlling this fan.

For automatic control according to an internal temperature sensor, Set to 'AUTO'.

For maximum rpm (AUTO CONTROL: OFF): Set to 'MAX'.

Note

The 'MAX' setting is effective for special installations.

However, since the fan rotation noise increases, the effect on the surrounding area should be taken into consideration.

For details, refer to section 3, "Installation Site Requirements" (pg. 20).

Factory setting: AUTO

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

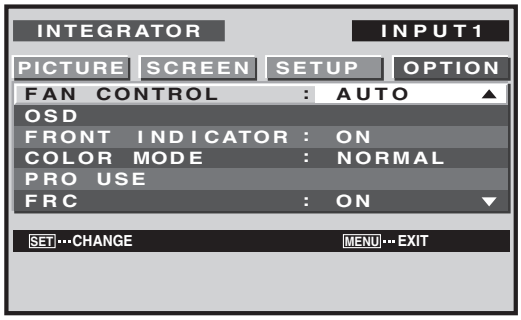
② Select 'OPTION'.

③ Place the cursor on 'FAN CONTROL' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

AUTO → MAX

The 'FAN CONTROL' setting is common for all inputs.

Screen ③



15) OSD Display Setting

This option allows the On-Screen-Display (OSD) menu to appear or to be hidden. OSD menu display features and location are adjustable.

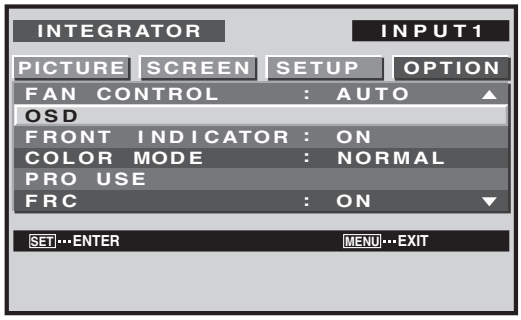
Factory setting: DISPLAY ..... ON
SIZE ..... LARGE
ANGLE ..... H

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

③ Place the cursor on 'OSD' then press the [SET] button.

Screen ③

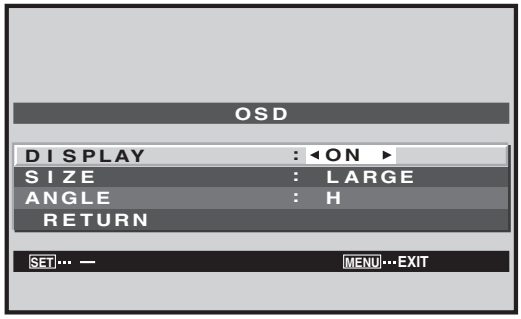


■ Setting the Screen display

④ Place the cursor on 'DISPLAY' then use the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.

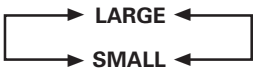
ON ..... Pressing the MENU button displays the menu.
OFF ..... Even if the MENU button is pressed, the menu is not displayed.

Screen ④



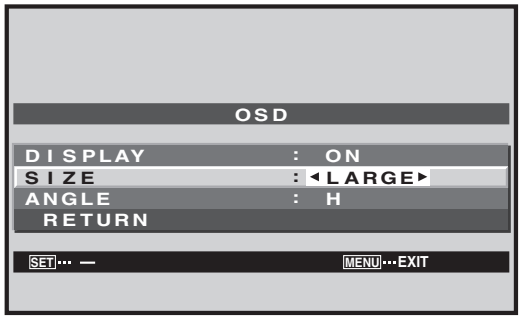
■ Setting the Screen size

⑤ Place the cursor on 'SIZE' then use the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.



LARGE ..... The display is doubled horizontally and vertically.
SMALL ..... The display appears in original size.

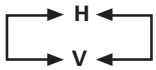
Screen ⑤



■ **Setting the display mode**

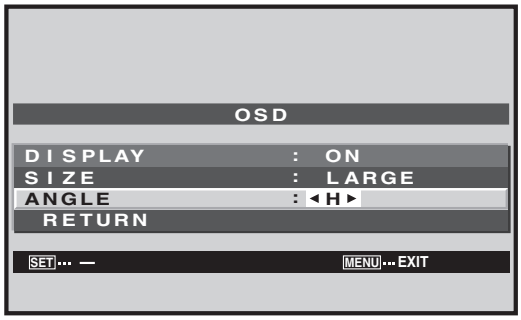
If the display is installed vertically, set the display mode to 'V'.

⑥ Place the cursor on 'ANGLE' then use the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.



H ..... The menu is displayed horizontally.
V ..... Because it is positioned vertically, the menu is displayed rotated 90°. The menu language is English.

Screen ⑥



Note

To return it to a vertical display, from the menu mode, select 'OPTION' → 'OSD ANGLE' → 'H'.

16) FRONT INDICATOR Setting

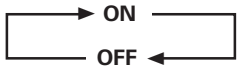
This function controls the flashing of the indicator on the front of the display.

Factory setting: ON

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

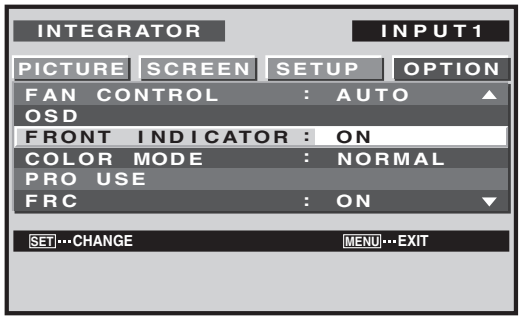
② Select 'OPTION'.

③ Place the cursor on 'FRONT INDICATOR' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.



ON: Normal LED function
OFF: Lights red during standby

Screen ③



The 'FRONT INDICATOR' setting is common for all inputs.

Note

Regardless of the ON/OFF setting, during POWER MANAGEMENT operation and shutdown, the green indicator flashes.

17) COLOR MODE Setting

In addition to the normal operation mode (NORMAL), this display has a (STUDIO) mode for use in a TV studio. The adjustment values for 'PICTURE' and 'SCREEN' can be set independently.
(Refer to section 5.4.4, "PICTURE, White Balance and SCREEN position Adjustment Values Memory Area Tables" (pg. 257).)
Change the settings to meet the desired usage.

Factory setting: NORMAL

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

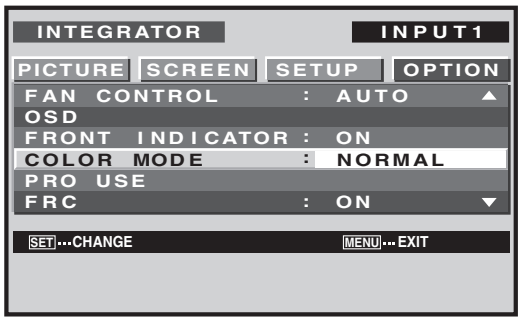
② Select 'OPTION'.

③ Place the cursor on 'COLOR MODE' then press the [SET] button to change the setting.
Each time the [SET] button is pressed, the setting changes as shown below.

NORMAL ⇄ **STUDIO**

When the 'COLOR MODE' setting is changed, all input functions as well as the 'PICTURE' and 'SCREEN' adjustment values for the input signal are changed.

Screen ③



The 'COLOR MODE' setting is common for all inputs.

18) PRO USE Setting

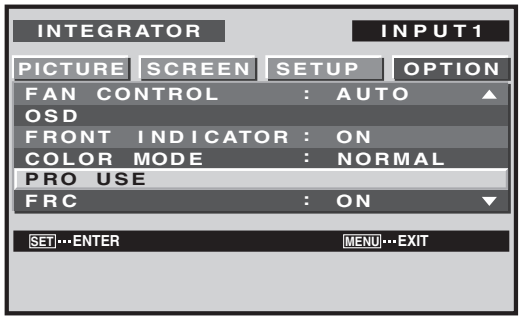
Factory setting: UNDERSCAN ..... OFF
IMAGE PROCESS ..... NORMAL
SIGNAL TYPE ..... MOTION

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

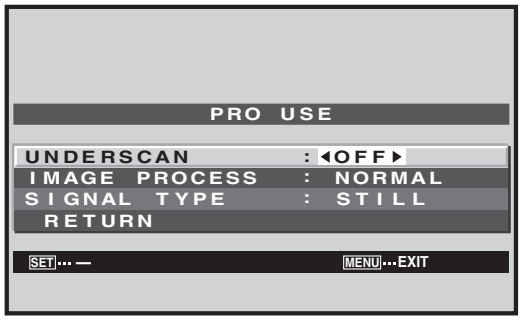
③ Place the cursor on 'PRO USE' then press the [SET] button.

Screen ③



④ Place the cursor on the desired item then use the [◄/►] buttons to change the setting.
Each time a [◄/►] button is pressed, the setting changes as shown below.

Screen ④



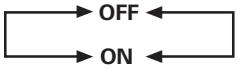
For PC signal input

• IMAGE PROCESS

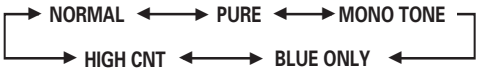
• SIGNAL TYPE

For video signal input (Applicable only when a PDA-5003 or PDA-5004 is installed.)

• UNDERSCAN



• IMAGE PROCESS



• SIGNAL TYPE

UNDERSCAN

This function causes the outer edge of the display to appear, beyond the normal effective data area for a video signal.

[Method of Use]
After setting the UNDERSCAN setting to ON and leaving the MENU mode, select 'UNDERSCAN' with the remote control's SCREEN SIZE button.

Note

Due to signal path loss or internal-circuit loss, the position may shift a little. However, since the display position cannot be adjusted using SIZE adjustment, adjust the display position at the source.

IMAGE PROCESS

Match the image to a specified display use.
NORMAL ..... Performs a normal display
PURE ..... Displays the input image as faithfully as possible
MONO TONE ... Cuts the color components of the image signal to display only the brightness signal
BLUE ONLY ..... Displays only when RGB are all blue signals. Set it to adjust COLOR and TINT.
HIGH CNT ..... Strengthens the contrast above the NORMAL level to raise the color temperature to approximately +2000 K

Note

Even when set to 'MONO TONE', color appears according to the adjustment of the white balance. To correct this, readjust the white balance.

SIGNAL TYPE

When performing YC separation (CVBS signal only) or IP conversion processing (interlace signal only), it is possible to set the image quality for a still image.
Normally, MOTION is set.

When performing YC separation or IP conversion processing, STILL locks the still image without showing motion. On a still image screen that may screen to have motion (blades of grass or forest), set to STILL.

Screen rolling may occur occasionally depending on the degree of degradation of the input signal. If this happens, Set to NON STD to solve this issue.

Note

- When STILL is set for a moving image, the picture quality may deteriorate.
- 3D Y/C processing is not performed in the NON STD mode. When this mode is set for a standard signal color, noise slightly may increase. Switching CTI to OFF can alleviate color noise depending on the screen pattern (refer to section 5.3.7, "5) CTI Setting" (pg. 194)).
- The NON STD mode is effective for NTSC CVBS (composite video signal).

19) FRC Setting

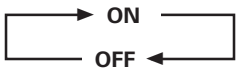
This option allows switching of the frame rate conversion.

Factory setting: ON

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

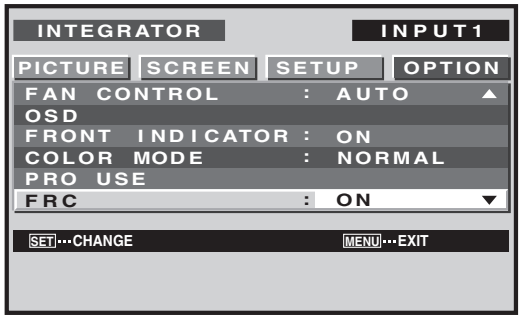
② Select 'OPTION'.

③ Place the cursor on 'FRC' then press the [SET] button.
Each time the [SET] button is pressed, the setting changes as shown below.



ON ..... Changes the frame rate.
OFF ..... Does not change the frame rate.

Screen ③



The 'FRC' setting is common for all inputs.

FRC MODE	Use	Input correspondence signals				
		PC		Vertical frequency Fv (Hz)	Horizontal frequency Fh (kHz)	Remarks
OFF	Retake at a TV studio (PAL camera)	PC 50Hz		49.67	24.69	640 x 480
				49.54	24.62	848 x 480
				50.08	40.365	1024 x 768
				49.861	39.988	1280 x 768
	Retake at a TV studio (NTSC camera)	PC 60Hz		59.94	31.47	640 x 480
				60.00	31.02	848 x 480
				60.00	48.36	1024 x 768
				59.87	47.78	1280 x 768
				60.02	63.98	1280 x 1024
				60.00	65.32	1400 x 1050
	FILM re-shoot for a movie (48 Hz camera)	PC 48Hz	*1	48.003	38.69	1024 x 768
			*2	48.014	38.51	1280 x 768

*1, 2: The recommended signal formats are shown below.

	Dot Clock	H-Period	H-Sync	H-BP	H-Disp	H-sync polarity	V-Period	V-Sync	V-BP	V-Disp	V-sync polarity
*1	52MHz	1344dot	134dot	163dot	1024dot	nega	806line	4line	31line	768line	nega
*2	65MHz	1688dot	118dot	242dot	1280dot	nega	802line	4line	29line	768line	nega

★ Applicable only when a PDA-5003 or PDA-5004 is installed.

FRC MODE	Use	Input correspondence signals				
		VIDEO/PC		Vertical frequency Fv (Hz)	Horizontal frequency Fh (kHz)	Remarks
OFF	Retake at a TV studio (PAL camera)	VIDEO 50Hz		50	15.63	625i (576i)/SDTV
					28.13	1125i (1080i)/HDTV
					31.25	625p (576p)/SDTV
					37.5	750p (720p)/HDTV
					56.25	1125p (1080p)/HDTV
					62.5	1250p/HDTV
	Retake at a TV studio (NTSC camera)	VIDEO 60Hz		60	15.75	525i (480i)/SDTV
					31.5	525p (480p)/SDTV
					33.75	1125i (1080i)/HDTV 1125i (1035i)/HDTV
					67.5	1125p (1080p)/HDTV
	Retake at a TV studio (PAL camera)	PC 50Hz		49.67	24.69	640 x 480
				49.54	24.62	848 x 480
				50.08	40.365	1024 x 768
				49.861	39.988	1280 x 768
	Retake at a TV studio (NTSC camera)	PC 60Hz		59.94	31.47	640 x 480
				60.00	31.02	848 x 480
				60.00	48.36	1024 x 768
				59.87	47.78	1280 x 768
				60.02	63.98	1280 x 1024
				60.00	65.32	1400 x 1050
	FILM re-shoot for a movie (48 Hz camera)	PC 48Hz	*1	48.003	38.69	1024 x 768
			*2	48.014	38.51	1280 x 768

*1, 2: The recommended signal formats are shown below.

	Dot Clock	H-Period	H-Sync	H-BP	H-Disp	H-sync polarity	V-Period	V-Sync	V-BP	V-Disp	V-sync polarity
*1	52MHz	1344dot	134dot	163dot	1024dot	nega	806line	4line	31line	768line	nega
*2	65MHz	1688dot	118dot	242dot	1280dot	nega	802line	4line	29line	768line	nega

20) POWER ON MODE Setting

This function sets the input at the time the power is switched on.

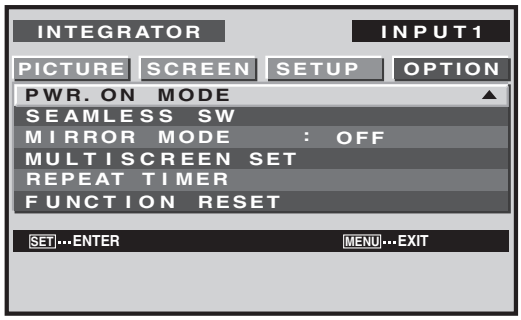
Factory setting: INPUT ..... LAST
VOLUME ..... LAST

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

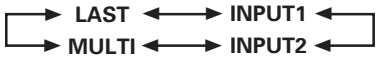
③ Place the cursor on 'PWR. ON MODE' then press the [SET] button.

Screen ③

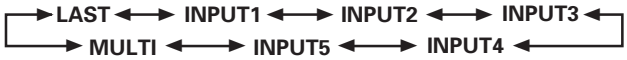


④ Place the cursor on 'INPUT' then use the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.

For PC signal input

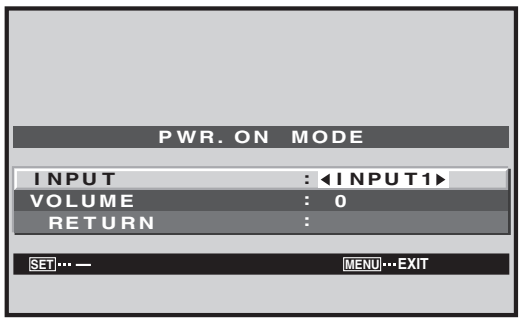


For video signal input (Applicable only when a PDA-5003/ PDA-5004 is installed.)



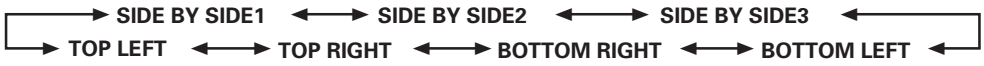
Select 'MULTI' then press the [SET] button to change to two-screen input.

Screen ④



■ **Setting when MULTI is selected**

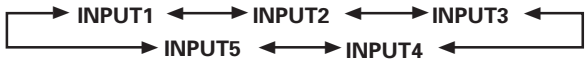
Place the cursor on 'MULTI MODE' then use the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.



Change the setting by placing the cursor on LEFT (or MAIN) in INPUT MODE, then pressing the [◄/►] buttons. The signal that has been selected is displayed in the left screen of SIDE BY SIDE 1 to 3 (or in the main screen of Picture-in-picture).
Each time a [◄/►] button is pressed, the setting changes as shown below.

For PC signal input

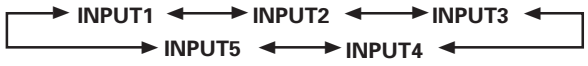
For video signal input (Applicable only when a PDA-5003/PDA-5004 is installed.)



Change the setting by placing the cursor on RIGHT (or SUB) in INPUT MODE, then pressing the [◄/►] buttons. The signal that has been selected is displayed in the right screen of SIDE BY SIDE 1 to 3 (or in the sub screen of Picture-in-picture).
Each time a [◄/►] button is pressed, the setting changes as shown below.

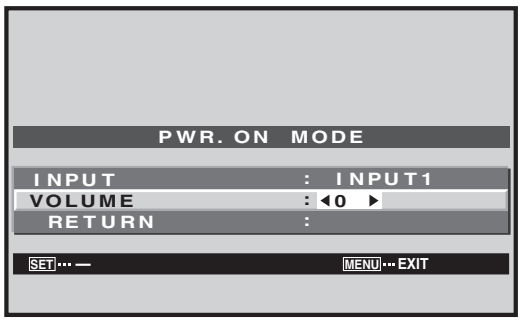
For PC signal input

For video signal input (Applicable only when a PDA-5003/ PDA-5004 is installed.)



⑤ Place the cursor on 'VOLUME' then use the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.

Screen ⑤



21) SEAMLESS SW Setting

This setting switches between inputs at a speed of approximately 0.4 seconds.

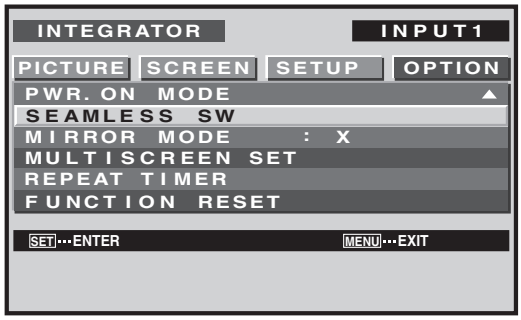
Factory setting:	SEAMLESS	OFF
	SELECT1	INPUT1
	SELECT2	INPUT2

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

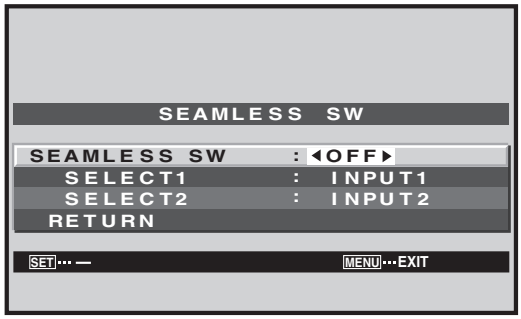
③ Place the cursor on 'SEAMLESS SW' then press the [SET] button.

Screen ③



④ Place the cursor on an item then use the [◄/►] buttons to change the settings.
Each time a [◄/►] buttons are pressed, the setting changes as shown below.

Screen ④



- SEAMLESS SW

ON ⇄ OFF

ON ..... The inputs set by 'SELECT1' and by 'SELECT2' are switched rapidly by the SWAP button
OFF ..... High speed switching does not occur

For PC signal input

- SELECT1

INPUT1 ⇄ INPUT2

- SELECT2

INPUT1 ⇄ INPUT2

For video signal input (Applicable only when a PDA-5003/PDA-5004 is installed.)

- SELECT1

INPUT1 ⇄ INPUT2 ⇄ INPUT3 ⇄ INPUT5 ⇄ INPUT4

- SELECT2

INPUT1 ⇄ INPUT2 ⇄ INPUT3 ⇄ INPUT5 ⇄ INPUT4

Note

During two-screen display and video wall, high speed switching is unavailable.

22) MIRROR MODE Setting

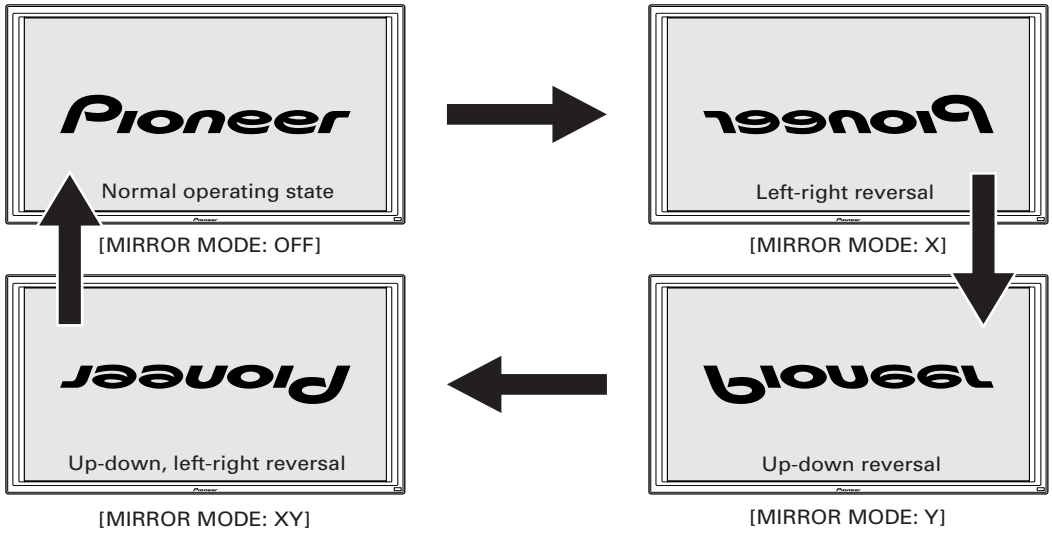
This function reverses the image displayed on the screen in various ways.

For normal reproduction: Set to 'MIRROR MODE: OFF'

For left-right reversed reproduction: Set to 'MIRROR MODE: X'

For up-down reversed reproduction: Set to 'MIRROR MODE: Y'

For up-down, left-right reproduction: Set to 'MIRROR MODE: XY'



The 'MIRROR MODE: XY' setting is useful when the panel is hung upside down from the ceiling. With the display suspended from the PDK-5012 mount, run the bundled cables up toward the ceiling.

Note

- To reverse an up-down setting, set 'MIRROR MODE' to 'XY' or 'Y'.
- When using the PDK-5012 ceiling mount, pay attention to the operating temperature conditions (Refer to section 4.8, "Ceiling Mount Unit: PDK-5012" (pg. 116)).

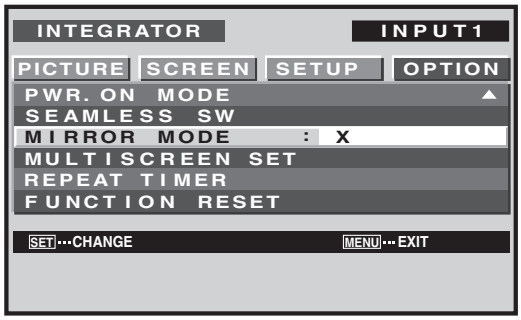
Factory setting: OFF

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

③ Place the cursor on 'MIRROR MODE' then press the [SET] button to change the setting.

Screen ③



④ Each time the [SET] button is pressed, the setting changes as shown below (the OSD is also reversed).

The 'MIRROR MODE' setting is common for all inputs.

Screen ④

23) MULTISCREEN Setting

This function divides the screen into two areas when the remote control's SPLIT button is pressed.

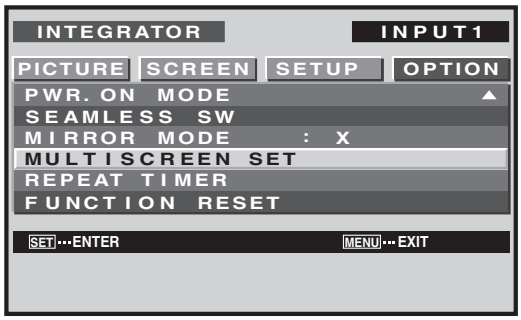
Factory setting:		
	S BY S SIZE	NORMAL
	S BY S LAYOUT	MODE1
	PIP SIZE	2
	TRANSLUCENT PIP	OFF
	BANNER PIP	OFF
	BANNER INPUT	INPUT1

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

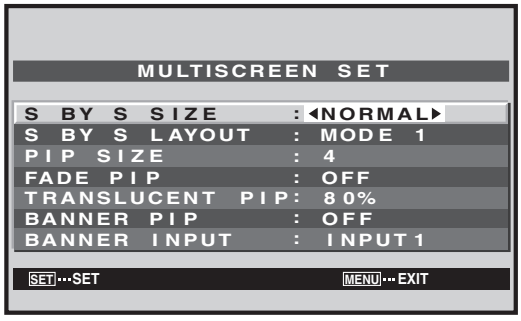
③ Place the cursor on 'MULTISCREEN SET' then press the [SET] button.

Screen ③



④ Place the cursor on an item then use the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.

Screen ④



- S BY S SIZE
  NORMAL ⟷ FULL
- S BY S LAYOUT
  MODE1 ⟷ MODE2 ⟷ MODE3
- PIP SIZE
  1 ⟷ 2 ⟷ 3 ⟷ 4
- FADE PIP
  OFF ⟷ ON
- TRANSLUCENT PIP
  OFF ⟷ 10% ⟷ 20% ⟷ 30% ⟷ 40% ⟷ 50% ⟷ 60% ⟷ 70% ⟷ 80%
- BANNER PIP
  OFF ⟷ BOTTOM1 ⟷ BOTTOM2 ⟷ BOTTOM3 ⟷ MID LOW ⟷ MID HIGH ⟷ TOP3 ⟷ TOP2 ⟷ TOP1 ⟷ LEFT ⟷ RIGHT
- BANNER INPUT
  INPUT1 ⟷ INPUT2

Press the [SET] button to return to screen ③.

S BY S SIZE/S BY S LAYOUT

Select a SIDE BY SIDE mode display, six options.

	MODE1	MODE2	MODE3
NORMAL	SBYS1	SBYS2	SBYS3
FULL	SBYS4	SBYS5	SBYS6

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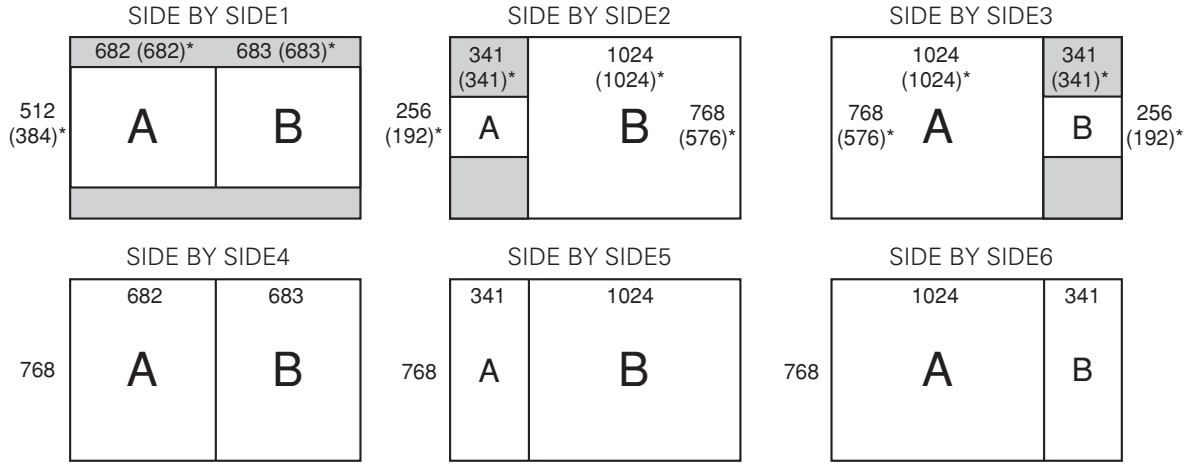

*: Numbers in ( ) represent a case of 16:9 contents.

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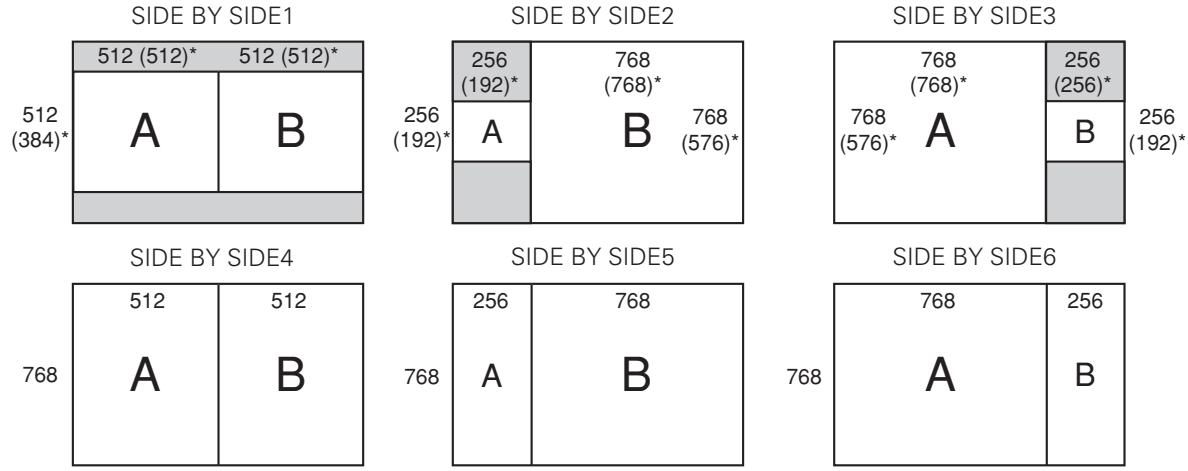

*: Numbers in ( ) represent a case of 16:9 contents.

PIP SIZE

Select the size of the PICTURE IN PICTURE sub-screen.

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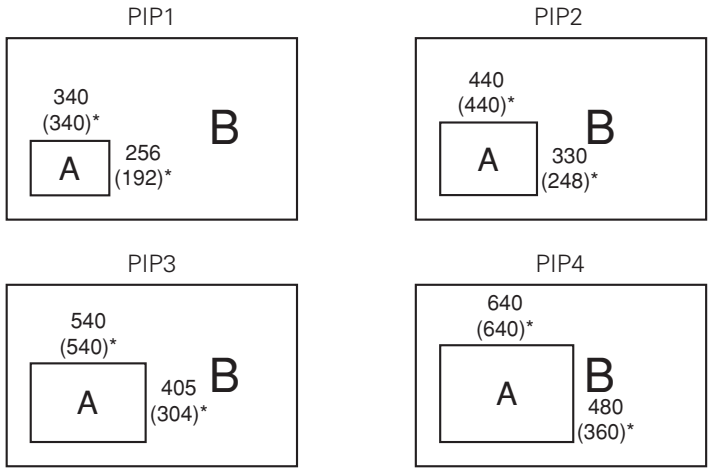

*: Numbers in ( ) represent a case of 16:9 contents.

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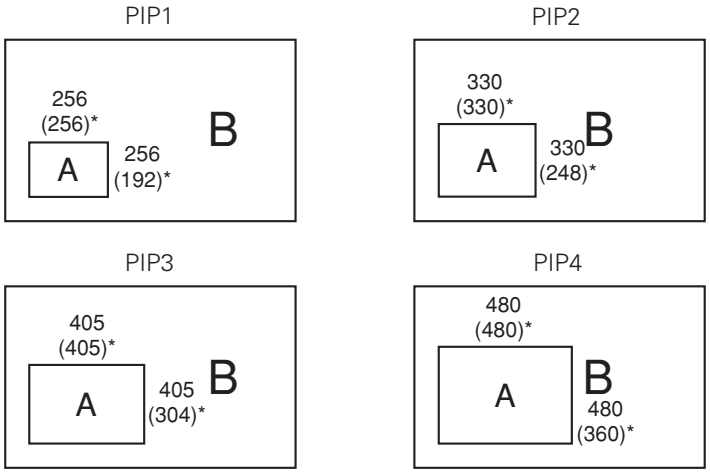


*: Numbers in ( ) represent a case of 16:9 contents.

Note

It is also reflected in the sub-screen size when PIP has been set by "5.3.4 Adjustments and setting in the Menu Mode: 13) SPLIT FREEZE Setting (pg. 188)", "5.3.7 Adjustments and setting in the Menu Mode: 21) SPLIT FREEZE Setting (pg. 213)".

FADE PIP

If it is set to ON, it is possible to fade in/fade out (gradually appear/disappear) the sub-screen of Picture-in-picture. Fade in occurs when the sub-screen has changed from no input to a signal.

It is possible to perform fade in/fade out with an RS-232C command at optional times. For details, refer to "5.5.5 List of RS-232C Commands (pg. 267)".

Note

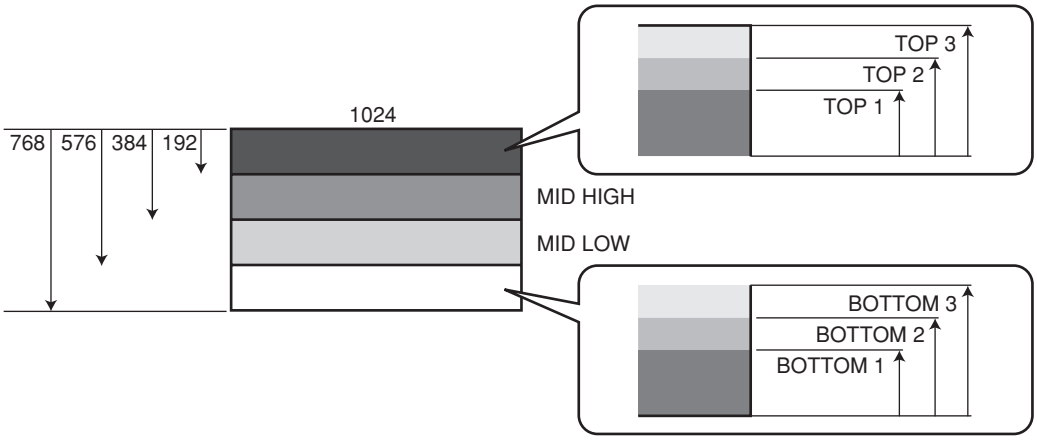
It also operates during BANNER PIP.

TRANSLUCENT PIP

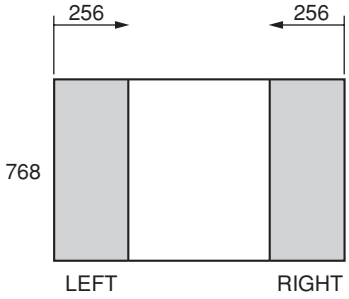
Select the degree of transparency for the PICTURE IN PICTURE sub-screen.
As the translucent percentage rises, the sub-screen becomes less visible, fades.

BANNER PIP

Select the PICTURE IN PICTURE sub-screen position from the locations shown below.
The Banner sub-screen option uses only the top 1/4 of a PC signal input. For example, to add a picture or text as a banner from Microsoft PowerPoint, the image or text must be placed in the top 1/4 area of the slide(s).



(It displays the left 256 dots of the input signal. The sub-screen operates only during personal computer signal input. To insert it, prepare it in an area of 256 dots x 786 lines on the left side.)



Note

The higher the resolution of the main screen, the blurrier the sub-screen appears.

BANNER INPUT

Select input (INPUT1 or INPUT2) during BANNER PIP.

Note

This function will not operate if the main screen and BANNER INPUT are the same.

24) REPEAT TIMER Setting

When two input modes have been set, they are displayed alternatively.
This can be used to set one screen, two screens, or video wall.

Factory setting: REPEAT TIMER ..... SINGLE
1. WORK TIME 00H10M
INPUT MODE INPUT1
2. WORK TIME 00H10M
INPUT MODE INPUT2

① Enter the integrator mode.
(Refer to section 5.4.1, "About the Integrator Mode" (pg. 214).)

② Select 'OPTION'.

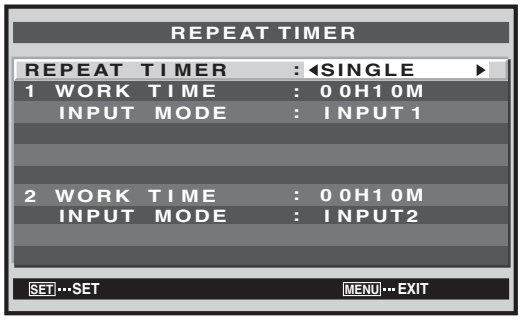
③ Place the cursor on 'REPEAT TIMER' then press the [SET] button.

④ Place the cursor on 'REPEAT TIMER' then use the [◄/►] buttons to change the settings.
Each time a [◄/►] button is pressed, the setting changes as shown below.

VIDEO WALL ◄► MULTI ◄► SINGLE

VIDEO WALL ..... It operates REPEAT TIMER during video wall.
MULTI ..... It operates REPEAT TIMER during two screen display.
SINGLE ..... It operates REPEAT TIMER during single screen display.

Screen ④



Each item is set as follows.
Select the item with the [▲/▼] buttons and change its setting with the [◄/►] buttons.

■ Setting the single screen REPEAT TIMER

- WORK TIME ..... It sets the display time in a range from one minute to 24 hours.
- INPUT MODE ..... It sets the signal that is displayed
  INPUT1 ⇔ INPUT2

Note

Perform this operation after turning the setting of DIVIDER in "5.4.3 Adjustments and setting in the Integrator Mode: 11) VIDEO WALL Setting (pg. 228)" to OFF.

■ Setting the two screen REPEAT TIMER

- MODE ..... This sets the display mode.
  S BY S1 ⇔ S BY S2 ⇔ S BY S3 ⇔ BTM LEFT ⇔ BTM RIGHT ⇔ TOP RIGHT ⇔ TOP LEFT
- WORK TIME ..... The display time is set in a range from one minute to 24 hours.

[When Side-by-side has been set]

- LEFT ..... The selected signal is displayed on the left side of Side-by-side 1 to 3
- RIGHT ..... The selected signal is displayed on the right side of Side-by-side 1 to 3

[When Picture-in-picture has been set]

- MAIN ..... The selected signal is displayed on the main screen of Picture-in-picture.
- SUB ..... The selected signal is displayed on the sub screen of Picture-in-picture.

Note

Perform this operation after turning the setting of DIVIDER in "5.4.3 Adjustments and setting in the Integrator Mode: 11) VIDEO WALL Setting (pg. 228)" to OFF.

■ Setting the Video Wall REPEAT TIMER

- DIVIDER ..... It sets screen division
  1 ⇔ 2 x 2 ⇔ 3 x 3
- WORK TIME ..... It sets the display time in a range from one minute to 24 hours.
- INPUT MODE ..... It sets the signal that is displayed
  INPUT1 ⇔ INPUT2

Note

- Perform this operation after turning the setting of AUTO ID in "5.4.3 Adjustments and setting in the Integrator Mode: 11) VIDEO WALL Setting (pg. 228)".
- The REPEAT TIMER of Video Wall and two screens do not operate simultaneously.
- In the case of VIDEO WALL, only No. 1 is set and all sets are controlled.

25) FUNCTIONAL LOCK

This is the FUNCTIONAL LOCK function that prevents operation from the main unit panel or the remote control in order to prevent improper operation after installation (The RS-232C command is effective.)

While the FUNCTIONAL LOCK is set, if the remote control or main unit operating panel are operated, the following are displayed in the center of the screen.

- 'BUTTONS LOCK'
- 'IR LOCK'
- 'BUTTONS & IR LOCK'
- 'MEMORY LOCK' *

* 'MEMORY LOCK'
  The input functions, volume, and multi-screen display status when 'MEMORY LOCK' is set are stored in memory, and when the power is turned on, the display complies with this information.

When it is shipped from the factory, the lock is set to OFF, so the remote control and the main unit panel can be operated.

Factory setting: Lock OFF

The following are two setting methods.

1) Main unit operating panel (concealed)
   Each time the [FUNCTIONAL LOCK (concealed)] button is pressed, the switching occurs in the following sequence.

   To turn the lock OFF, press and hold the [FUNCTIONAL LOCK (concealed)] button for at least about five seconds.

2) RS-232C command
   Refer to "5.5.5 List of RS-232C Commands (pg. 267)".

Note

When POWER ON MODE has been simultaneously set, POWER ON MODE has priority.

26) Center Position Display

It is possible to display the horizontal and vertical center position.

① Press the [MUTING] button twice.

② Press the [SUB INPUT] button.

③ Press the [SET] button.

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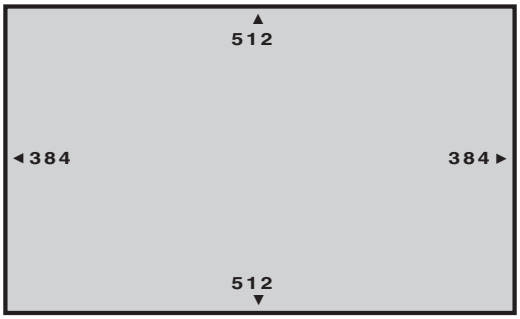
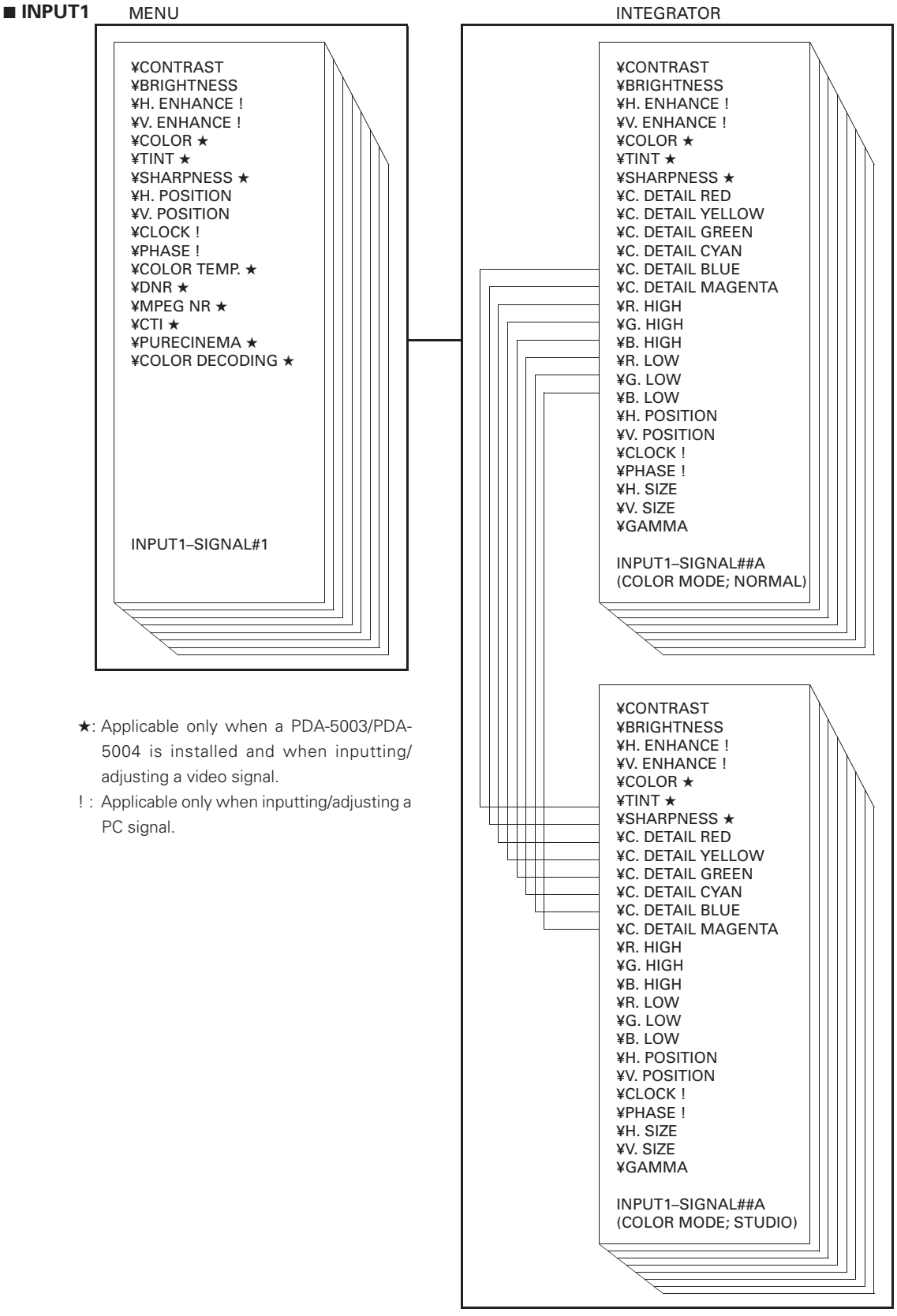


When it is off, Press the [MENU] button, [DISPLAY] button or [STANDBY ON] button etc.

5.4.4 PICTURE, White Balance and SCREEN Position Adjustment Values Memory Area Tables

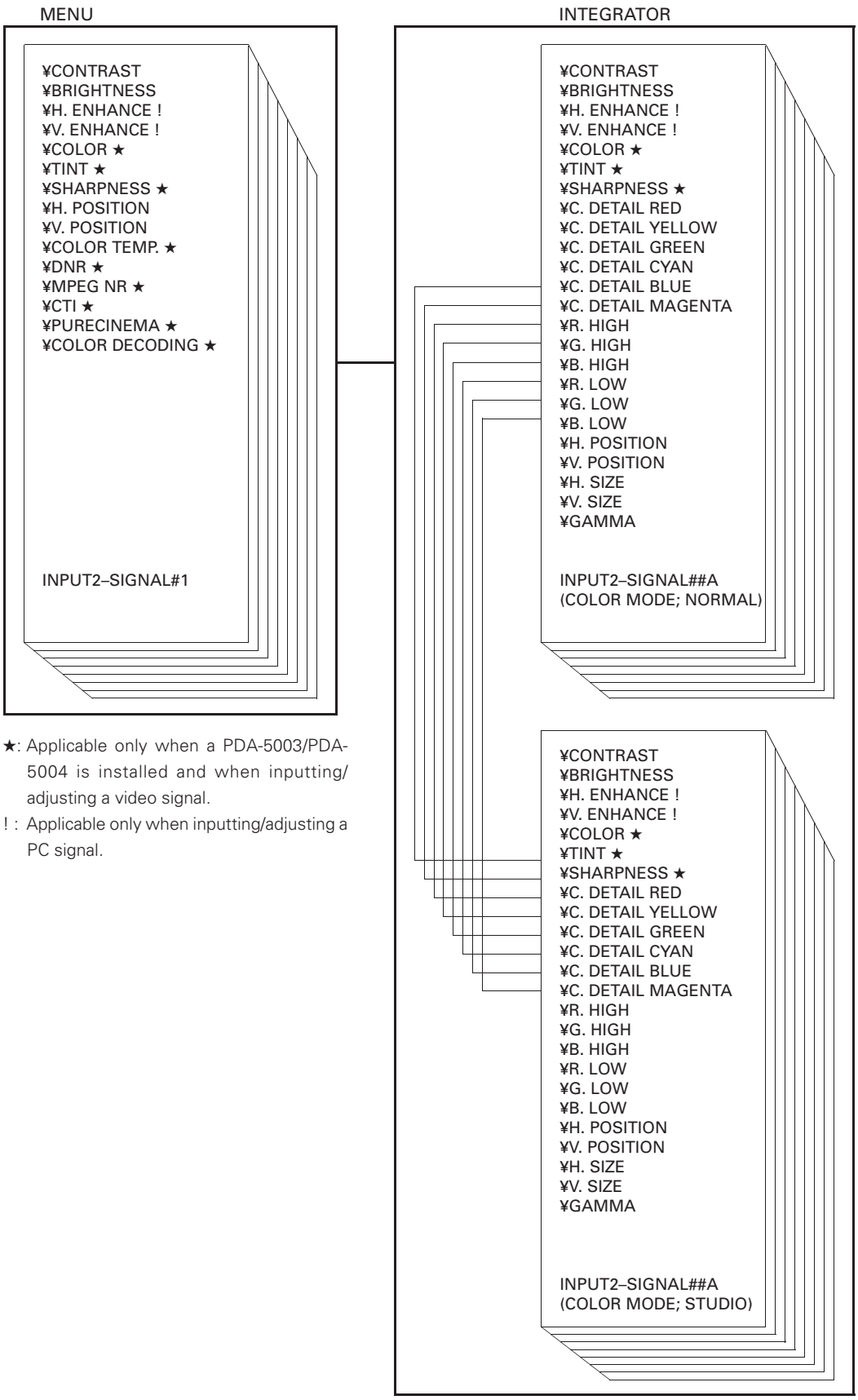
The memory areas for the PICTURE, White Balance and SCREEN adjustment values have the configuration shown below. Adjustments in the menu mode share the same memory as the COLOR MODE NORMAL and STUDIO. The adjustment values in the integrator mode are stored in memory that is separate from that for COLOR MODE NORMAL and STUDIO.



★: Applicable only when a PDA-5003/PDA-5004 is installed and when inputting/adjusting a video signal.

! : Applicable only when inputting/adjusting a PC signal.

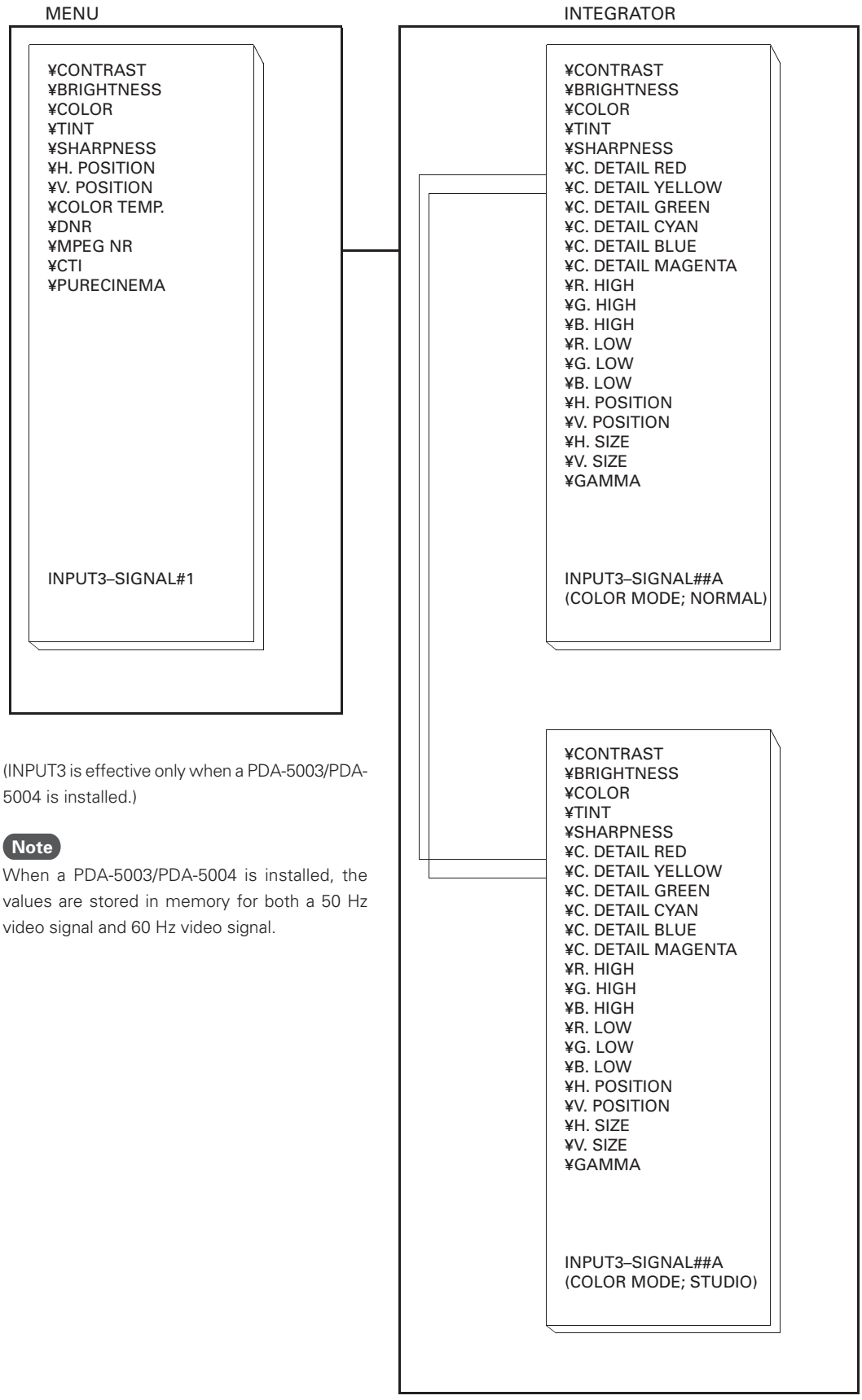
■ **INPUT2**



★: Applicable only when a PDA-5003/PDA-5004 is installed and when inputting/adjusting a video signal.

! : Applicable only when inputting/adjusting a PC signal.

■ **INPUT3**

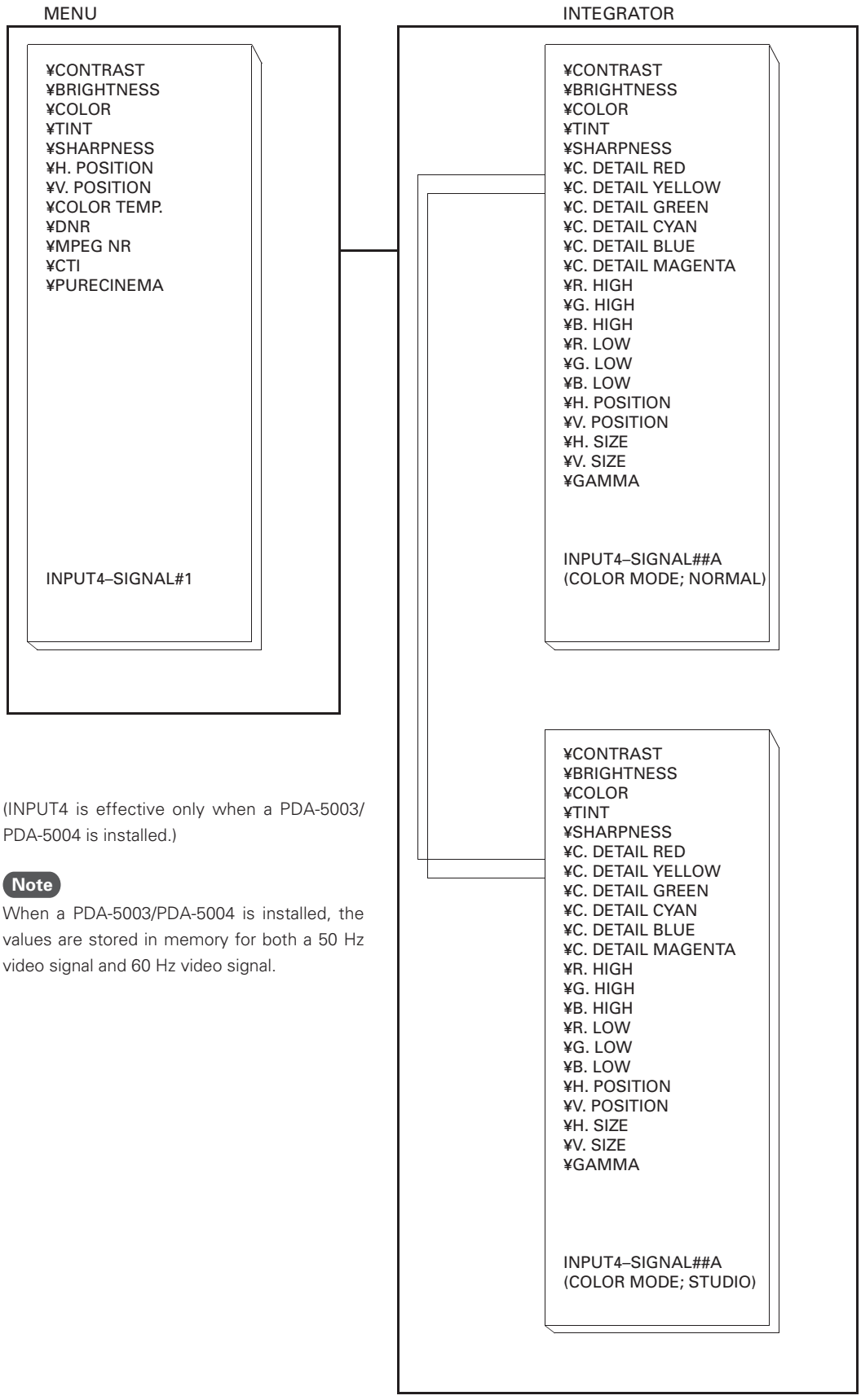


(INPUT3 is effective only when a PDA-5003/PDA-5004 is installed.)

Note

When a PDA-5003/PDA-5004 is installed, the values are stored in memory for both a 50 Hz video signal and 60 Hz video signal.

■ **INPUT4**

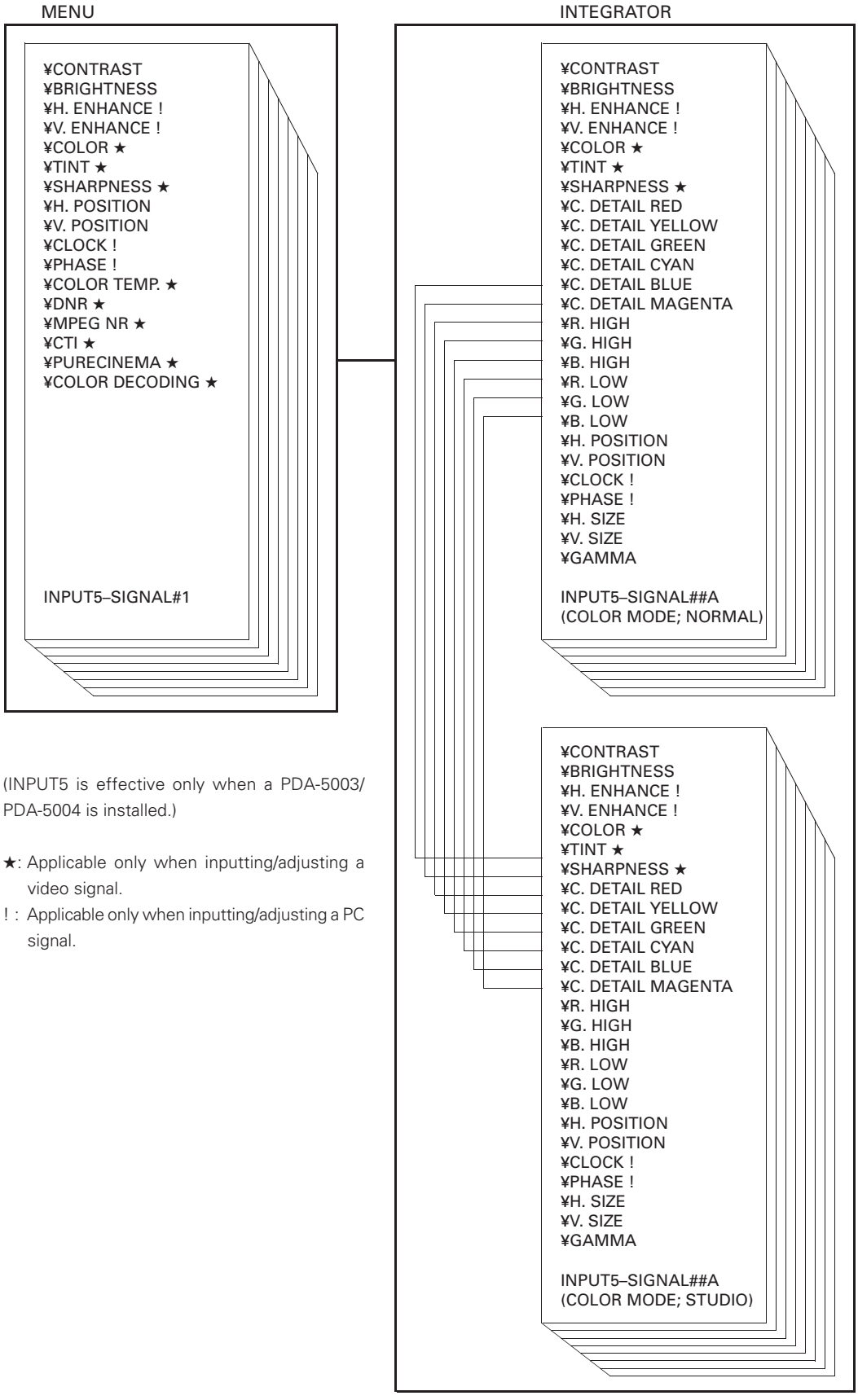


(INPUT4 is effective only when a PDA-5003/PDA-5004 is installed.)

Note

When a PDA-5003/PDA-5004 is installed, the values are stored in memory for both a 50 Hz video signal and 60 Hz video signal.

■ **INPUT5**



(INPUT5 is effective only when a PDA-5003/ PDA-5004 is installed.)

★: Applicable only when inputting/adjusting a video signal.

! : Applicable only when inputting/adjusting a PC signal.

5.5 RS-232C Adjustment

This display has an RS-232C terminal. It is possible to use a PC to make various adjustments and settings.

5.5.1 About the RS-232C Adjustment

Adjustments using the RS-232C:

- The adjustments are written to the same memory area as for the integrator mode (refer to section 5.4.4, "PICTURE, White Balance and SCREEN Position Adjustment Values Memory Area Tables" (pg. 257 to 261)).

Note

(1) **Assign an ID before using the RS-232C adjustment. Include the panel ID in the RS-232C command. For details, refer to section 5.5.2, "Interface" (pg. 263).**

(2) Of the adjustment values and setting items set by RS-232C commands, there are some items that are stored in memory and some that are not. For details, refer to section 5.5.5, "List of RS-232C Commands" (pg. 267). Also, when storing values in "last" memory, the conditions described in section 5.1.5, "Last Memory" (pg. 170), must be satisfied.

(3) <OSDS00>/<OSDS01> (OSD display disable/enable setting)
Regardless of the setting, the following items can be displayed.
- Menu display (menu mode, integrator mode)
- Warnings before Auto Power OFF or Power Management operation
- Warning of high temperature inside the panel
- Display announcing that the FUNCTIONAL LOCK is set and the FUNCTIONAL LOCK setting display
- Display call (including holding a button down)

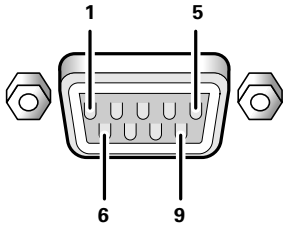
(4) When using RS-232C commands, control the input signal as well as the power. If the power is ON when there is no signal, the display continues to have a weak discharge. This activity can affect the life of the display.

5.5.2 Interface

1) Connector
D-sub 9 pins (male/straight)

2) Pin layout

Pin No.	Signal	Pin No.	Signal
1	NC (not connected)	6	NC (not connected)
2	TxD (Transmit Data)	7	NC (not connected)
3	RxD (Receive Data)	8	RTS (Request To Send)
4	NC (not connected)	9	NC (not connected)
5	GND		

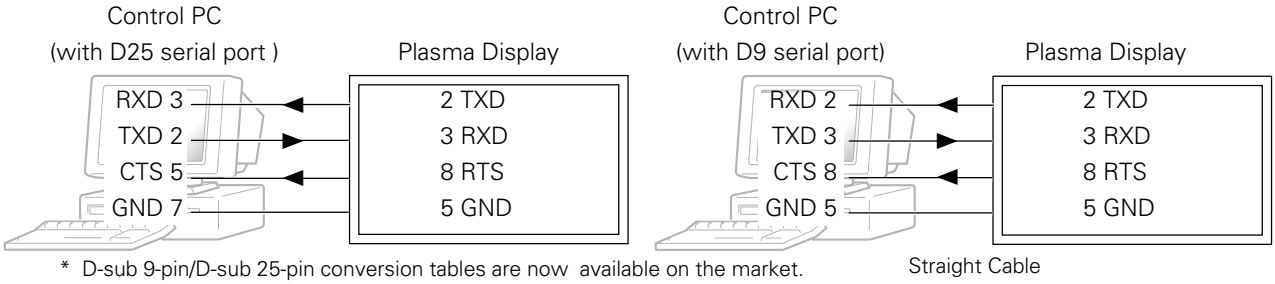


3) Baud Rate
9 600 bps (standard)
(switch-able to 1 200, 2 400, 4 800, 19 200, 38 400 bps)

Note
The baud rate of this display should be set to match the baud rate of the PC.
Also, when the RS-232C cable is extended over a long distance, use a slower baud rate.

4) Data format
Start bit: 1 bit
Data bit: 8 bit
Parity: no
Stop bit: 1 bit

5) Connection



* D-sub 9-pin/D-sub 25-pin conversion tables are now available on the market.

6) Protocol

From the PC to the display

(1) Sending one command at a time:

STX (02 hex)	ID (2 Byte)	COMMAND (3 Byte or 6 Byte)	ETX (03 hex)

(2) Sending numerical direct commands:

STX (02 hex)	ID (2 Byte)	COMMAND (3 Byte)	ARGUMENT (3 Byte)	ETX (03 hex)

ID, COMMAND, ARGUMENT are transmitted as ASCII characters.

From the display to a PC

(1) Echo back (Normal response)
Command received and returned but the ID is not returned.

STX (02 hex)	COMMAND (3 Byte or 6 Byte)	ETX (03 hex)

Received command is a numerical direct effect command and numerical data is returned:

STX (02 hex)	COMMAND (3 Byte)	ARGUMENT (3 Byte)	ETX (03 hex)

(2) Error (Abnormal response)
Received command is a non-corresponding command, 'ERR' is returned:

STX (02 hex)	ERR (3 Byte)	ETX (03 hex)

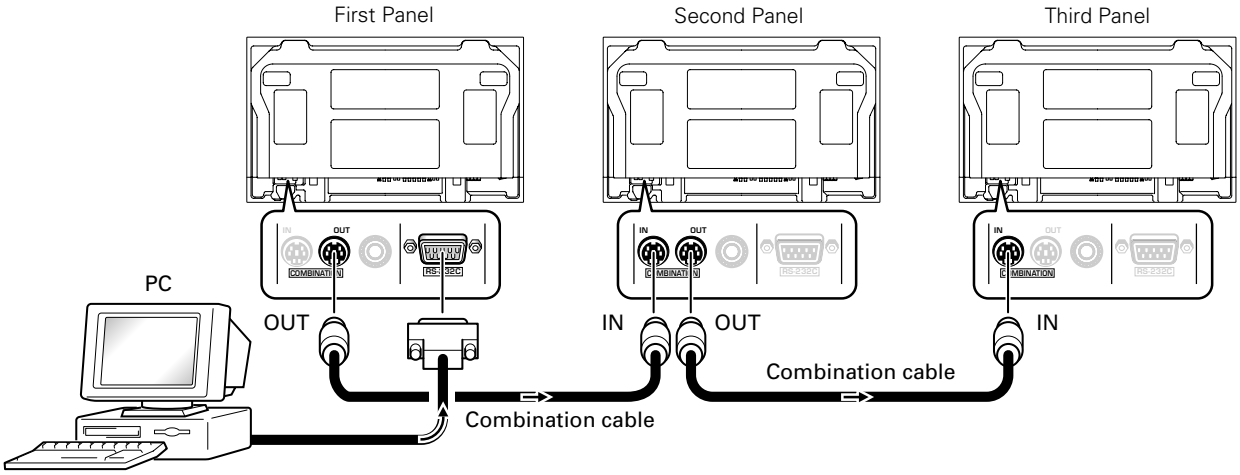
Received command cannot be processed (when PON is received when the power is already ON, etc.), 'XXX' is returned:

STX (02 hex)	XXX (3 Byte)	ETX (03 hex)

5.5.3 Combination Connection

When controlling/adjusting panels, it is convenient to connect several displays to one PC.
By performing a combination connection and assigning IDs to the panels, it is possible to control and adjust several displays at the same time or separately.

Connection method:
Connect the panels as shown in the figure below.



Note

Only the combination IN terminal or the RS-232C terminal can be used at the same time. Connecting them at the same time could cause errors. Also, do not pair combination IN terminals or combination OUT terminals. Doing so could cause communication to fail.

It is possible to use a general-purpose mini DIN 6-pin (straight) cable for the combination cable.

Note

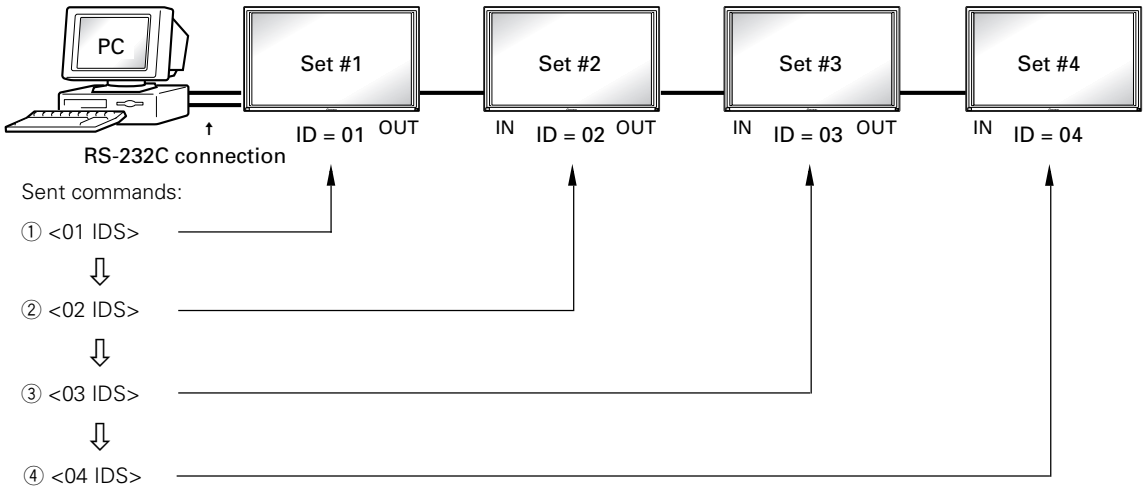
To output RS-232C signals from the combination OUT terminal, an ID must be assigned.
For details, refer to section, 5.5.4, "ID Assignment" (pg. 265).

5.5.4 ID Assignment

The ID is assigned from the PC.

Commands: <IDC> (ID CLEAR) ..... Clears the assigned ID
<IDS> (ID SET) ..... Assigns an ID
IDS is only effective when an ID is not assigned.
IDs are assigned starting from the panel closest to the PC.

Example: Case of 4 displays (assigning IDs with the PC for the first time)
First, connect an RS-232C and combination cables. (Refer to section 5.5.3, "Combination Connection" (pg. 264).)



By sending RS-232C commands in this order, it is possible to assign an ID for each panel.
When a panel has a PC-assigned ID, it can only receive commands containing the ID. Assign an ID before sending a command.

Characters that can be used for an ID include, 0 - 9 and A - F (there is not distinction between upper case and lower case letters).
An ∗ (asterisk) can be used as follows:
<**IDC>: Clear the IDs assigned for all panels
<2∗IN1>: The input for which the first digit is 2 is set to INPUT1

Precautions when assigning IDs

Panels connected after a display's ID has been cleared cannot be operated with RS-232C commands.
When the <**IDC> command is sent, the IDs for all the sets from Set #1 to Set #4 are cleared. Only the first panel, which is directly connected to the PC, can be controlled.
Send the command <01 IDS> to control the next panel. Continue setting IDs in this way for the remaining panels to once again control the displays.

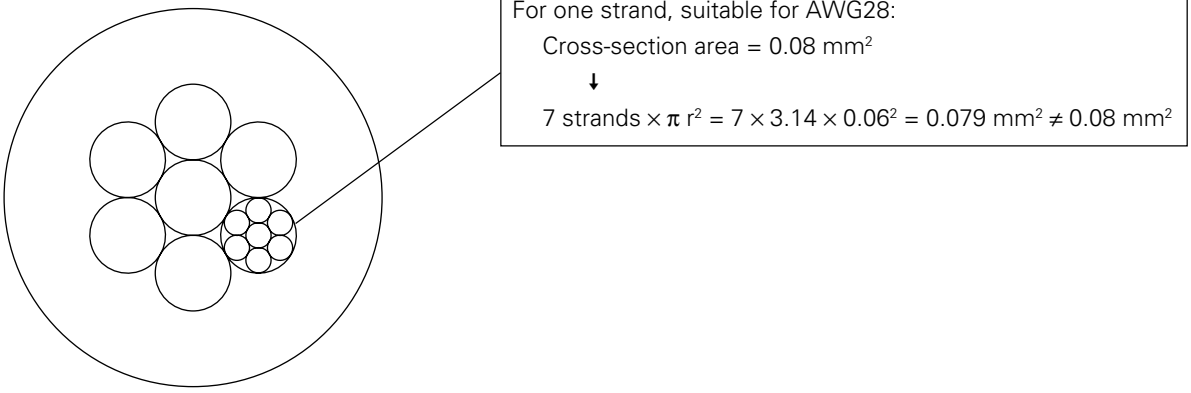
Note

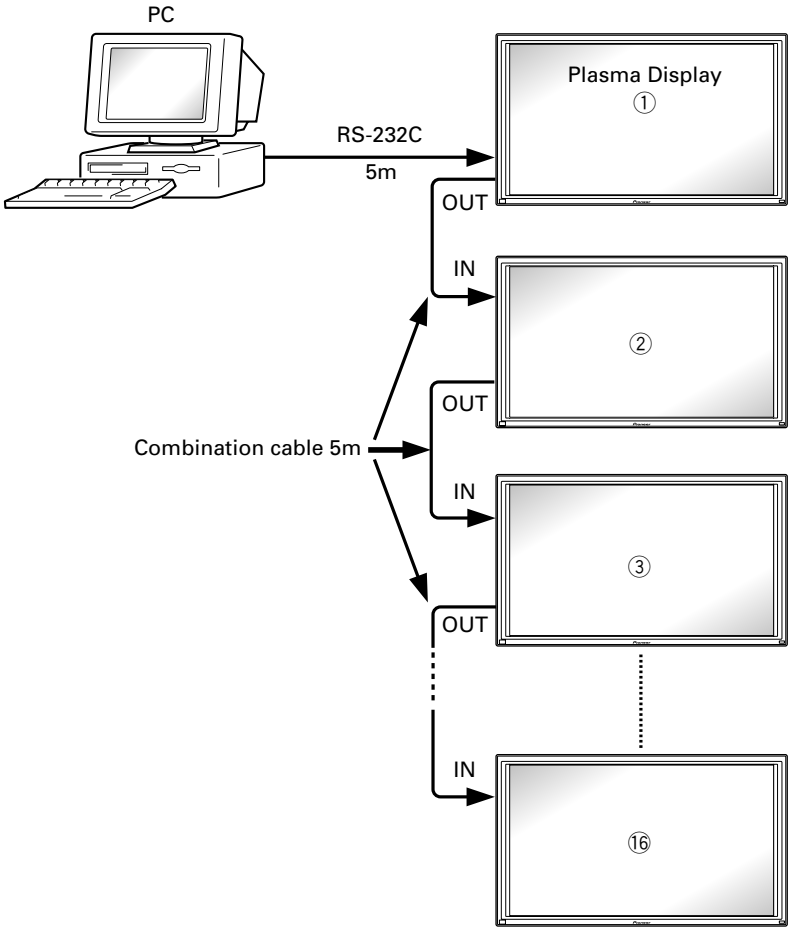
When the IDs are set, when one or both of the IDs before a command is sent from the PC is an ∗, there is no echo.
When sending more commands, wait six seconds before sending the next command.
Example) When **OOO and ∗1OOO or 1∗OOO (OOO is the command) are sent from the PC, operation is performed but there is no echo.

RS-232C Adjustment

Under the connection conditions shown below, use a combination cable for up to 16 panels.

Conditions: ① Length of RS-232C cable connecting PC to Plasma Display: 5 m
② Combination cable length: 5 m each
③ Wire specifications for linking cable: Mini Din 6-pin straight (7 strand cable)





Note

For details on the number of displays that can be connected in series using the video OUT terminal (INPUT1, 4), refer to section 2.3, "Controls and Connectors" (pg. 12).

5.5.5 List of RS-232C Commands (Command 434CMX = Command 43MXE1 / Command 505CMX = Command 50MXE10 , 50MXE11 , 50MXE1 , 50MXE1-S / Command 425CMX = Command 42MXE10)

■ **Normal Operation Related Commands**

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
POWER								
POF	←	←	Turns the power OFF.				●	
PON	←	←	Turns the power ON.				●	
INPUT SELECT								
INP	←	←	Displays the present input.					
INPS01	←	←	Switches the main screen to INPUT1.				●	
INPS02	←	←	Switches the main screen to INPUT2.				●	
INPS03	←	←	Switches the main screen to INPUT3.				●	
INPS04	←	←	Switches the main screen to INPUT4.				●	
INPS05	←	←	Switches the main screen to INPUT5.				●	
IN1	←	←	Switches the main screen to INPUT1.				●	
IN2	←	←	Switches the main screen to INPUT2.				●	
IN3	←	←	Switches the main screen to INPUT3.				●	
IN4	←	←	Switches the main screen to INPUT4.				●	
IN5	←	←	Switches the main screen to INPUT5.				●	
SSIS01	←	←	Switches the sub screen to INPUT1.				●	
SSIS02	←	←	Switches the sub screen to INPUT2.				●	
SSIS03	←	←	Switches the sub screen to INPUT3.				●	
SSIS04	←	←	Switches the sub screen to INPUT4.				●	
SSIS05	←	←	Switches the sub screen to INPUT5.				●	
–	SWM	←	Outputs main input to the full screen.				●	
–	SWS	←	Outputs sub input to the full screen.				●	
SCREEN SIZE								
AST	←	←	Executes auto-setup.				●	
SZM	←	←	Displays the present screen size.					
SZMS00	←	←	Sets SCREEN SIZE to DOT BY DOT.				●	
SZMS01	←	←	Sets SCREEN SIZE to 4 :3.				●	
SZMS02	←	←	Sets SCREEN SIZE to FULL.				●	
SZMS03	←	←	Sets SCREEN SIZE to ZOOM.				●	
SZMS05	←	←	Sets SCREEN SIZE to WIDE.				●	
–	SZMS06	←	Sets SCREEN SIZE to 14:9.				●	
SZMS09	←	←	Sets SCREEN SIZE to UNDERSCAN.				●	
–	SZMS10	←	Sets SCREEN SIZE to 2.35:1.				●	
VIDEO								
MTN	PMTS00	←	Turns video mute to OFF.				●	
MTY	PMTS01	←	Turns video mute to ON.				●	
SLN	STLS00	←	Cancels FREEZE.				●	
SLY	STLS01	←	Sets FREEZE.				●	
AUDIO								
VOL	←	←	Adjusts audio volume.	●	000	042	●	
AMN	AMTS00	←	Turns audio mute to OFF.				●	
AMY	AMTS01	←	Turns audio mute to ON.				●	
–	AUSS01	←	Sets the audio source to main.				●	
–	AUSS02	←	Sets the audio source to sub.				●	
MULTI SCREEN								
MSC	←	←	Displays the present multi-screen.					
–	MSCS00	←	Turns MULTI SCREEN to OFF.				●	
–	MSSS01	←	Sets the PinP subscreen size to 1.				●	
–	MSSS02	←	Sets the PinP subscreen size to 2.				●	
–	MSSS03	←	Sets the PinP subscreen size to 3.				●	
–	MSSS04	←	Sets the PinP subscreen size to 4.				●	
MST	←	←	Displays the present multi-screen type.					
MSTS01	←	←	Sets the MULTI SCREEN to 2 SCREEN (side by side 1)				●	
MSTS02	←	←	Sets the MULTI SCREEN to PinP (lower right).				●	
MSTS03	←	←	Sets the MULTI SCREEN to PinP (upper right).				●	
MSTS04	←	←	Sets the MULTI SCREEN to PinP (upper left).				●	
MSTS05	←	←	Sets the MULTI SCREEN to PinP (lower left).				●	

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
MSTS06	←	←	Sets the MULTI SCREEN to PoutP (side by side, 2-L).				●	
–	MSTS08	←	Sets MULTI SCREEN to SWAP (switches between main and sub screens).				●	
–	MSTS09	←	Sets MULTI SCREEN to PoutP (side by side 2-R).				●	
–	MSTS10	←	Sets MULTI SCREEN to 2-SCREEN (side by side 3).				●	
–	MSTS11	←	Sets MULTI SCREEN to PoutP (side by side 4-L).				●	
–	MSTS12	←	Sets MULTI SCREEN to PoutP (side by side 4-R).				●	
SSI	←	←	Displays the present input to the SUB Screen.					
FUNCTIONAL LOCK								
FCL	←	←	Displays the present set value of the FUNCTIONAL LOCK.					
FCLS00	←	←	Cancels FUNCTIONAL LOCK.				●	
FCLS01	←	←	Prohibits operation of buttons on the display.				●	
FCLS02	←	←	Prohibits operation of buttons on the remote control.				●	
FCLS03	←	←	Prohibits operation of buttons on the display/remote control.				●	
FCLS04	←	←	Sets the memory lock				●	
OSD								
DOF	←	←	Turns off the OSD display that is now displayed.					

■ "MENU"–"SETUP" related commands

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
COLOR TEMP.								
CTP	←	←	Displays the present set value of the color temperature.					
CTPS01	←	←	Sets the color temperature to LOW.				●	
CTPS02	←	←	Sets the color temperature to MID LOW.				●	
CTPS03	←	←	Sets the color temperature to MIDDLE.				●	
CTPS04	←	←	Sets the color temperature to MID HIGH.				●	
CTPS05	←	←	Sets the color temperature to HIGH.				●	
DNR								
DNR	←	←	Displays the present set value of the DNR.					
DNRS00	←	←	Sets digital NR to OFF.				●	
DNRS01	←	←	Sets digital NR to LOW.				●	
DNRS02	←	←	Sets digital NR to MIDDLE.				●	
DNRS03	←	←	Sets digital NR to HIGH.				●	
MPEG NR								
MNR	←	←	Displays the present set value of the MPEG NR.					
MNRS00	←	←	Sets MPEG NR to OFF.				●	
MNRS01	←	←	Sets MPEG NR to LOW.				●	
MNRS02	←	←	Sets MPEG NR to MIDDLE.				●	
MNRS03	←	←	Sets MPEG NR to HIGH.				●	
CTI								
CTR	←	←	Displays the present set value of CTI.					
CTRS00	←	←	Sets CTI to OFF.				●	
CTRS01	←	←	Sets CTI to ON.				●	
PURE CINEMA								
PUC	←	←	Displays the present set value of PURE CINEMA.					
PUCS00	←	←	Sets PURE CINEMA to OFF.				●	
PUCS01	←	←	Sets PURE CINEMA to STANDARD.				●	
COLOR DECORDING								
MCD	←	←	Displays the present color decoding.					
MCDS01	←	←	Sets COLOR DECORDING to RGB (VIDEO).				●	
MCDS02	←	←	Sets COLOR DECORDING to COMPONENT1 (YCbCr).				●	
MCDS03	←	←	Sets COLOR DECORDING to COMPONENT2 (YPbPr).				●	
COLOR SYSTEM								
CLS	←	←	Displays the present set value of the color system.					
CLSS01	←	←	Sets color system to AUTO.				●	
CLSS02	←	←	Sets color system to NTSC.				●	
CLSS03	←	←	Sets color system to PAL.				●	
CLSS04	←	←	Sets color system to SECAM.				●	

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
CLSS05	←	←	Sets color system to 4.43NTSC.				●	
CLSS06	←	←	Sets color system to PAL M.				●	
CLSS07	←	←	Sets color system to PAL N.				●	
SIGNAL FORMAT								
SFT	←	←	Displays the present set value of the SIGNAL FORMAT.					
SFTS01	←	←	Sets SIGNAL FORMAT to Type1.				●	Note 1
SFTS02	←	←	Sets SIGNAL FORMAT to Type2.				●	Note 1
SFTS03	←	←	Sets SIGNAL FORMAT to Type3.				●	Note 1
SFTS04	←	←	Sets SIGNAL FORMAT to Type4.				●	Note 1
–	SFTS05	←	Sets SIGNAL FORMAT to Type5.				●	
–	SFTS06	←	Sets SIGNAL FORMAT to Type6.				●	
–	SFTS07	←	Sets SIGNAL FORMAT to Type7.				●	
–	SFTS08	←	Sets SIGNAL FORMAT to Type8.				●	
–	←	SFTS09	Sets SIGNAL FORMAT to Type9.				●	New
–	←	SFTS20	Sets SIGNAL FORMAT to Type10.				●	New
–	SFTS10	←	Sets SIGNAL FORMAT to AUTO.				●	
DVI								
EDIS01	DSGS01	←	Sets the DVI connection signal to PC.				●	Note 2
EDIS02	DSGS02	←	Sets the DVI connection signal to STB/DVD.				●	Note 2
–	DBLS01	←	Sets the DVI BLACK LEVEL to LOW.				●	
–	DBLS02	←	Sets the DVI BLACK LEVEL to HIGH.				●	

Note 1: The operation differs between the PDP-434CMX/PDP-505CMX and PDP-425CMX/PDP-507CMX/PDP-427CMX
Note 2: EDIS01/02 only operates on the PDP-505CMX

■ "MENU"–"OPTION" related commands

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
ENERGY SAVE								
ESV	←	←	Displays the present set value of ENERGY SAVE.					
ESVS00	←	←	Sets ENERGY SAVE to STANDARD (STANDARD1).				●	Sets STANDARD1 only on the 507CMX
ESVS01	←	←	Sets ENERGY SAVE to save energy.				●	
ESVS02	←	←	Sets ENERGY SAVE to fixed brightness.				●	
ESVS03	←	←	Sets ENERGY SAVE to mode 3 (long service life).				●	
ESVS04	←	←	Sets ENERGY SAVE to AUTO.				●	
–	←	ESVS05	Sets ENERGY SAVE to MUTE.				●	New
–	←	ESVS06	Sets ENERGY SAVE to standard 2.				●	New, and effective only on the 507CMX
TIMER								
–	TSMS00	←	Turns summer time to OFF.				●	
–	TSMS01	←	Turns summer time to ON.				●	
–	TPH	←	Sets the hour of the present time.	●	000	023	●	000 – 023: Set by 24-hour clock time
–	TPM	←	Sets the minute of the present time.	●	000	059	●	000 – 059: Set for 60 minutes
–	TPW	←	Sets the day of week of the present time.	●	001	007	●	001: Monday – 007; Saturday
–	TPTS00	←	Sets PROGRAM TIMER/REPEAT TIMER to OFF.				●	
–	TPTS01	←	Sets PROGRAM TIMER to ON.				●	
–	←	TPTS02	Sets REPEAT TIMER to ON.				●	New
ORBITER								
OMN	ORBS00	←	Sets the ORBITER to OFF.				●	
OMY	ORBS01	←	Sets the ORBITER to ON (AUTO1).				●	
–	ORBS02	←	Sets the ORBITER to ON (AUTO2).				●	
–	ORBS03	←	Sets the ORBITER to ON (AUTO3).				●	
SOFT FOCUS								
–	SOFS00	←	Sets SOFT FOCUS to OFF.				●	
–	SOFS01	←	Sets SOFT FOCUS to 1.				●	
–	SOFS02	←	Sets SOFT FOCUS to 2.				●	
–	SOFS03	←	Sets SOFT FOCUS to 3.				●	
–	SOFS04	←	Sets SOFT FOCUS to 4.				●	
SUB SCREEN FREEZE								
–	SSTS00	←	Sets SUB SCREEN FREEZE to OFF.				●	
–	SSTS01	←	Sets SUB SCREEN FREEZE to SIDE BY SIDE.				●	
–	SSTS02	←	Sets SUB SCREEN FREEZE to PinP.				●	

■ "INTEGRATOR"–"PICTURE" related commands

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
VIDEO QUALITY								
CNT	←	←	Adjusts the contrast.	●	000	255	●	
BRT	←	←	Adjusts the brightness.	●	000	255	●	
ENH	←	←	Adjusts the horizontal enhance.	●	000	015	●	
ENV	←	←	Adjusts the vertical enhance.	●	000	015	●	
COL	←	←	Adjusts the color.	●	000	127	●	
TNT	←	←	Adjusts the tint.	●	000	060	●	
SHP	←	←	Adjusts the sharpness.	●	000	015	●	
WHITE BALANCE								
RHI	←	←	Adjusts R.HIGH of the white balance.	●	000	255	●	
GHI	←	←	Adjusts G.HIGH of the white balance.	●	000	255	●	
BHI	←	←	Adjusts B.HIGH of the white balance.	●	000	255	●	
GLW	←	←	Adjusts G.LOW of the white balance.	●	000	255	●	
RLW	←	←	Adjusts R.LOW of the white balance.	●	000	255	●	
BLW	←	←	Adjusts B.LOW of the white balance.	●	000	255	●	
COLOR DETAIL								
CGR	←	←	Adjusts color detail red.	●	000	060	●	
CGY	←	←	Adjusts color detail yellow.	●	000	060	●	
CGG	←	←	Adjusts color detail green.	●	000	060	●	
CGC	←	←	Adjusts color detail cyan.	●	000	060	●	
CGB	←	←	Adjusts color detail blue.	●	000	060	●	
CGM	←	←	Adjusts color detail magenta.	●	000	060	●	
GAMMA								
GRA	←	←	Displays the present set value of gradation.					
–	GRAS18	←	Sets gradation GAMMA 1.8.				●	
–	GRAS19	←	Sets gradation GAMMA 1.9.				●	
–	GRAS20	←	Sets gradation GAMMA 2.0.				●	
–	GRAS21	←	Sets gradation GAMMA 2.1.				●	
–	GRAS22	←	Sets gradation GAMMA 2.2.				●	
–	GRAS23	←	Sets gradation GAMMA 2.3.				●	
–	GRAS24	←	Sets gradation GAMMA 2.4.				●	
PRESET								
STD	←	←	Restores the PICTURE, W/B adjustment value of the integrator to the initial values.				●	

■ "INTEGRATOR"–"SCREEN" related commands

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
POSITION								
HPS	←	←	Adjusts the horizontal position.	●	000	255	●	
VPS	←	←	Adjusts the vertical position.	●	000	255	●	
CLOCK/PHASE								
CFR	←	←	Adjusts the CLOCK (PLL frequency).	●	000	255	●	
CPH	←	←	Adjusts the PHASE (PLL phase).	●	000	031	●	
SIZE								
HSI	←	←	Adjusts the horizontal size.	●	000	064	●	
VSI	←	←	Adjusts the vertical size.	●	000	064	●	
PRESET								
FRP	←	←	Restores the SCREEN adjustment value of the integrator to the initial values.				●	

■ "INTEGRATOR"–"SETUP" related commands

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
SUB VOLUME								
SVL	←	←	Adjusts the SUB VOLUME.	●	000	020	●	

■ "INTEGRATOR"–"OPTION" related commands

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
SCREEN MASK								
FMK	←	←	Displays the present set value of SCREEN MASK.					
FMKS00	←	←	Sets SCREEN MASK to OFF.				●	
FMKS02	←	←	Sets SCREEN MASK to inverse (negative – positive reversed).				●	
FMKS03	←	←	Sets SCREEN MASK to white mask.				●	
FMKS04	←	←	Sets SCREEN MASK to red mask.				●	
FMKS05	←	←	Sets SCREEN MASK to green mask.				●	
FMKS06	←	←	Sets SCREEN MASK to blue mask.				●	
FMKS07	←	←	Sets SCREEN MASK to yellow mask.				●	
SIDE MASK								
RSL	←	←	Adjusts side mask RED.	●	000	255	●	
GSL	←	←	Adjusts side mask GREEN.	●	000	255	●	
BSL	←	←	Adjusts side mask BLUE.	●	000	255	●	
–	←	SMAS00	Sets AUTO SIDE MASK to OFF.					New
–	←	SMAS01	Sets AUTO SIDE MASK to ON.					New
VIDEO WALL								
MGF	←	←	Displays the set value of VIDEO WALL.					
MGFS00	←	←	Sets VIDEO WALL to OFF.				●	
–	MGFS11	←	Sets VIDEO WALL to DIVIDER:1.				●	
–	MGFS12	←	Sets VIDEO WALL to DIVIDER:4.				●	
–	MGFS13	←	Sets VIDEO WALL to DIVIDER:9.				●	
–	MGFS14	←	Sets VIDEO WALL to DIVIDER:16.				●	
–	MGFS15	←	Sets VIDEO WALL to DIVIDER:25.				●	
MGP	←	←	Displays the present VIDEO WALL (accounting/not accounting for expanded position/joints) setting.					
MGPSnn	←	←	nn=01 to 04: Sets display position during DIVIDER=2 x 2 (not accounting for joints).				●	
			nn=05 to 08: Sets display position during DIVIDER=2 x 2 (accounting for joints).				●	
			nn=10 to 18: Sets display position during DIVIDER=3 x 3 (not accounting for joints).				●	
			nn=20 to 28: Sets display position during DIVIDER=3 x 3 (accounting for joints).				●	
			nn=30 to 3F: Sets display position during DIVIDER=4 x 4 (not accounting for joints).				●	
			nn=40 to 4F: Sets display position during DIVIDER=4 x 4 (accounting for joints).				●	
			nn=50 to 68: Sets display position during DIVIDER=5 x 5 (not accounting for joints).				●	
			nn=70 to 88: Sets display position during DIVIDER=5 x 5 (accounting for joints).				●	
–	IDA	←	Executes AUTO ID setting.				●	
–	PDES00	←	Sets POWER ON DELAY mode to OFF.				●	
–	PDES01	←	Sets POWER ON DELAY mode to ON (other than cases used for a higher than 16 screen system) or mode 1 (used for a higher than 16 screen system).				●	
–	PDES02	←	Sets POWER ON DELAY mode 2 (used for a higher than 16 screen system).				●	
–	LNKS00	←	Sets ABL link to OFF.				●	
–	LNKS01	←	Sets ABL link to ON.				●	
RS-232C								
BRA	←	←	Displays the present set value of baud rate.					
BRAS01	←	←	Sets the RS-232C baud rate to 1200 bps.				●	
BRAS02	←	←	Sets the RS-232C baud rate to 2400 bps.				●	
BRAS03	←	←	Sets the RS-232C baud rate to 4800 bps.				●	
BRAS04	←	←	Sets the RS-232C baud rate to 9600 bps.				●	
BRAS05	←	←	Sets the RS-232C baud rate to 19200 bps.				●	
BRAS06	←	←	Sets the RS-232C baud rate to 38400 bps.				●	
ID NUMBER								
IDC	←	←	Clears the ID number.				●	
IDS	←	←	Sets the ID number.				●	

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
FAN								
FCM	←	←	Maximizes fan rotation control.				●	
FCA	←	←	Automates fan rotation control.				●	
–	–	FCU	Sets integrator's fan rotation control maximum to apply a brightness				●	New, and effective only on the 507CMX
OSD								
DIN	OSDS00	←	Sets OSD display to OFF.				●	
DIY	OSDS01	←	Sets OSD display to ON.				●	
–	OSSS01	←	Displays expanded OSD.				●	
–	OSSS02	←	Displays contracted OSD.				●	
–	OSAS01	←	Sets the OSD display angle to horizontal.				●	
–	OSAS02	←	Sets the OSD display angle to vertical.				●	
FRONT INDICATOR								
LEN	LESS00	←	Sets the FRONT INDICATOR to OFF.				●	
LEY	LESS01	←	Sets the FRONT INDICATOR to ON.				●	
COLOR MODE								
CM1	CLMS00	←	Sets the COLOR MODE to NORMAL.				●	
CM2	CLMS01	←	Sets the COLOR MODE to STUDIO.				●	
UNDER SCAN								
USCS00	←	←	Sets the UNDERSCAN setting to OFF.				●	
USCS01	←	←	Sets the UNDERSCAN setting to ON.				●	
USC	←	←	Displays the present set value of UNDERSCAN.					
IMAGE PROCESS								
–	IPR	←	Obtains the present IMAGE PROCESS setting.					
–	IPRS01	←	Sets the IMAGE PROCESS to NORMAL.				●	
–	IPRS02	←	Sets the IMAGE PROCESS to PURE.				●	
–	IPRS03	←	Sets the IMAGE PROCESS to MONOTONE.				●	
–	IPRS04	←	Sets the IMAGE PROCESS to HIGH CONTRAST.				●	
–	–	IPRS05	Sets the IMAGE PROCESS to BLUE ONLY.				●	New
FRC								
FRC	←	←	Displays the present set value of FRC.					
–	FRCS00	←	Sets the FRC to OFF.				●	
FRCS01	←	←	Sets the FRC to ON.				●	Note 1
SEAMLESS INPUT SWITCH								
–	SLSS00	←	Sets the SEAMLESS INPUT SWITCH mode to OFF.				●	
–	SLSS01	←	Sets the SEAMLESS INPUT SWITCH mode to ON.				●	
–	SL1S01	←	Sets the SEAMLESS SW SELECT 1 to INPUT1.				●	
–	SL1S02	←	Sets the SEAMLESS SW SELECT 1 to INPUT2.				●	
–	SL1S03	←	Sets the SEAMLESS SW SELECT 1 to INPUT3.				●	
–	SL1S04	←	Sets the SEAMLESS SW SELECT 1 to INPUT4.				●	
–	SL1S05	←	Sets the SEAMLESS SW SELECT 1 to INPUT5.				●	
–	SL2S01	←	Sets the SEAMLESS SW SELECT 2 to INPUT1.				●	
–	SL2S02	←	Sets the SEAMLESS SW SELECT 2 to INPUT2.				●	
–	SL2S03	←	Sets the SEAMLESS SW SELECT 2 to INPUT3.				●	
–	SL2S04	←	Sets the SEAMLESS SW SELECT 2 to INPUT4.				●	
–	SL2S05	←	Sets the SEAMLESS SW SELECT 2 to INPUT5.				●	
MIRROR								
MIRS00	←	←	Sets mirror mode to OFF (normal display).				●	
MIRS01	←	←	Performs left-right reversal with MIRROR MODE.				●	
MIRS02	←	←	Performs up-down reversal with MIRROR MODE.				●	
MIRS03	←	←	Performs up-down left-right reversal with MIRROR MODE.				●	
MULTI SCREEN								
–	PTRS00	←	Sets sub screen translucence to OFF (0%).				●	
–	PTRS01	←	Sets sub screen translucence to 10 %.				●	
–	PTRS02	←	Sets sub screen translucence to 20 %.				●	
–	PTRS03	←	Sets sub screen translucence to 30 %.				●	
–	PTRS04	←	Sets sub screen translucence to 40 %.				●	
–	PTRS05	←	Sets sub screen translucence to 50 %.				●	
–	PTRS06	←	Sets sub screen translucence to 60 %.				●	
–	PTRS07	←	Sets sub screen translucence to 70 %.				●	
–	PTRS08	←	Sets sub screen translucence to 80 %.				●	

Note 1: The operation differs between the PDP-434CMX/PDP-505CMX and PDP-425CMX/PDP-507CMX/PDP-427CMX

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
–	BPIS01	←	Sets the BANNER PinP input to INPUT1.				●	
–	BPIS02	←	Sets the BANNER PinP input to INPUT2.				●	
–	BPPS00	←	Sets the BANNER PinP setting to OFF.				●	
–	BPPS01	←	Sets the BANNER PinP setting to TOP3.				●	
–	BPPS02	←	Sets the BANNER PinP setting to MID-HIGH.				●	
–	BPPS03	←	Sets the BANNER PinP setting to MID-LOW.				●	
–	BPPS04	←	Sets the BANNER PinP setting to BOTTOM3.				●	
–	←	BPPS05	Sets the BANNER PinP setting to TOP2.				●	New
–	←	BPPS06	Sets the BANNER PinP setting to BOTTOM2.				●	New
–	←	BPPS07	Sets the BANNER PinP setting to TOP1.				●	New
–	←	BPPS08	Sets the BANNER PinP setting to BOTTOM1.				●	New
–	←	BPPS09	Sets the BANNER PinP setting to LEFT.				●	New
–	←	BPPS10	Sets the BANNER PinP setting to RIGHT.				●	New
–	←	PFAS00	PIP fade in function ineffective.				●	New
–	←	PFAS01	PIP fade in function effective.				●	New
–	←	PFAS10	PIP fade in (only when PIP fade in function is effective).					New
–	←	PFAS11	PIP fade off (only when PIP fade in function is effective).					New
FUNCTION								
FDT	←	←	Executes FUNCTION DEFAULT.				●	

■ Other commands

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
DISPLAY CALL								
–	DITS01	←	Displays DISPLAY CALL 1.					
–	DITS02	←	Displays DISPLAY CALL 2.					
–	IM0	←	INFORMATION write-in (1-3 characters).				●	
–	IM1	←	INFORMATION write-in (4-6 characters).				●	
–	IM2	←	INFORMATION write-in (7-9 characters).				●	
–	IM3	←	INFORMATION write-in (10-12 characters).				●	
–	IM4	←	INFORMATION write-in (13-15 characters).				●	
–	IM5	←	INFORMATION write-in (16-18 characters).				●	
–	IM6	←	INFORMATION write-in (19-21 characters).				●	
–	IMD	←	Clears INFORMATION.				●	
AUXILIARY COMMAND								
DW0	←	←	Subtracts 10 from the adjustment value.					
DWF	←	←	Minimizes the adjustment value.					
DWn	←	←	Subtracts n from the adjustment value. (n=1~9)					
UP0	←	←	Adds 10 to the adjustment value.					
UPF	←	←	Maximizes the adjustment value.					
UPn	←	←	Adds n to the adjustment value (n = 1 to 9).					
GST	QST	←	Obtains status information.					
GPI	QPI	←	Obtains integrator/PICTURE information.					
GWB	QWB	←	Obtains integrator/WHITE BALANCE information.					
GPS	QPS	←	Obtains integrator/SCREEN information.					
GSS	QSS	←	Obtains SETUP information.					
GSO	QSO	←	Obtains Menu Integrator/OPTION information.					
–	QAP	←	Obtains various machine names.					
–	QCI	←	Obtains time information.					
–	QSU	←	Obtains audio status.					
OTHER								
–	–	MRKS00	Sets mark display off.					New
–	–	MRKS01	Sets mark display on.					New
–	–	RMCS10	Remote control key: CURSOR RIGHT					New
–	–	RMCS11	Remote control key: CURSOR LEFT					New
–	–	RMCS12	Remote control key: CURSOR UP					New
–	–	RMCS13	Remote control key: CURSOR DOWN					New
–	–	RMCS14	Remote control key: SET					New
–	–	RMCS25	Remote control key: MENU					New

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
–	–	RMCS26	Remote control key: POINT ZOOM					New
–	–	RMCS27	Remote control key: ID NO SET					New
–	–	RMCS28	Remote control key: CLEAR					New
–	–	RMCS29	Remote control key: FREEZE					New
–	–	RMCS30	Remote control key: STANDBY/ON					New
–	–	RMCS31	Remote control key: VOLUME UP					New
–	–	RMCS32	Remote control key: VOLUME DOWN					New
–	–	RMCS33	Remote control key: MUTING					New
–	–	RMCS34	Remote control key: SCREEN SIZE					New
–	–	RMCS35	Remote control key: SPLIT					New
–	–	RMCS36	Remote control key: SUB INPUT					New
–	–	RMCS37	Remote control key: PIP SHIFT					New

5.5.6 QUEST Commands

What are QUEST commands?

- Quest commands output TXD such as adjustment data from the panel's microprocessor to a PC.
- Adjustment and other data is output in ASCII code.

Note Command names are given inside brackets < >.

- Data output format

STX (02hex)	Command (3 Byte)	Data	....	Data	Checksum (2 Byte)	ETX (03hex)

Note

- A QUEST command is invalid when no ID has not been assigned.
- A QUEST command is invalid when a wildcard (*) is used in the ID when sending the command.

■ Quest Command Table

Command 434CMX 505CMX	Command 425CMX	Command 427CMX 507CMX	Function	Number direct			Last memory	Comment
				Effective	Minimum	Maximum		
GST	QST	←	Obtains status information.					
GPI	QPI	←	Obtains integrator/PICTURE information.					
GWB	QWB	←	Obtains integrator/WHITE BALANCE information.					
GPS	QPS	←	Obtains integrator/SCREEN information.					
GSS	QSS	←	Obtains SETUP information.					
GSO	QSO	←	Obtains Menu Integrator/OPTION information.					
–	QAP	←	Obtains audio status.					
–	QCI	←	Obtains time information.					
–	QSU	←	Obtains various machine names.					

1) Obtaining QST Status Information

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QST (fixed)
3	Generation information	1 Byte	5 (fixed)
4	Inch information	1 Byte	4: 42 inch 5: 50 inch
5	Forwarding	1 Byte	M (fixed)
6	Power source state	1 Byte	S: Standby status P: Power supplied status
7	During standby: Standby cause	1 Byte	N: Normal standby time W: Standby time based on POWER MANAGEMENT S: Standby time based on SD or PD
	During power supply: main screen signal status		N: normal signal input time L: no signal input time O: OUT OF RANGE signal input time
8	During standby or 1 screen display: dummy data	1 Byte	
	During 2-screen display: sub screen signal status		N: normal signal input time L: no signal input time O: OUT OF RANGE signal input time
9	Main input function information	3 Byte	IN1: INPUT1 IN2: INPUT2 IN3: INPUT3 IN4: INPUT4 IN5: INPUT5
10	Sub input function information	3 Byte	IN1: INPUT1 IN2: INPUT2 IN3: INPUT3 IN4: INPUT4 IN5: INPUT5 Note1)
11	Main screen size information	1 Byte	0: DOT BY DOT 1: 4:3 2: FULL 3: ZOOM 5: WIDE 6: 14:9 9: UNDERSCAN A: 2.35:1
12	Two-screen display state	1 Byte	0: OFF (1 screen) 1: SIDE BY SIDE 1 2: PinP (lower right) 3: PinP(upper right) 4: PinP (upper left) 5: PinP(lower left) 6: SIDE BY SIDE 2-L 9: SIDE BY SIDE 2-R A: SIDE BY SIDE 3 B: SIDE BY SIDE 4-L C:SIDE BY SIDE 4-R
13	Functional lock information	1 Byte	0: LOCK OFF 1: BUTTONS LOCK 2: IR LOCK 2: IR LOCK 3: IR&BUTTONS LOCK 4: MEMORY LOCK
14	Temperature information 1 (interior)	3 Byte	Temperature inside the set (Centigrade) Note 2)
15	Temperature information 2 (outside air)	3 Byte	Outside air temperature (Celsius) Note 2)
16	Temperature information 3 (SLOT)	3 Byte	SLOT temperature (Celsius) Note 2)
17	Serial No.	15 Byte	15 digit character string
18	Dummy data	3 Byte	
19	Dummy data	2 Byte	
20	HOUR METER	5 Byte	5 digit number
21	Check sum	2 Byte	
22	ETX	1 Byte	03hex

Note 1) During standby and during a single screen display, the unit outputs the value that is in memory.

Note 2) During standby and immediately after POWER ON, the correct value is not output.
In this case, please obtain the information after waiting a short period of time after POWER ON.
These types of information are output as reference information (these are not guaranteed information).
Normally refer to temperature information 3.

2) <QPI> Obtaining Integrator/PICTURE information

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QPI (fixed)
3	CONTRAST	3 Byte	000 to 255 Note 1)
4	BRIGHTNESS	3 Byte	000 to 255 Note 1)
5	C,DETAIL R (RED)	3 Byte	000 to 060 Note 1)
6	C,DETAIL Y (YELLOW)	3 Byte	000 to 060 Note 1)
7	C,DETAIL G (GREEN)	3 Byte	000 to 060 Note 1)
8	C,DETAIL C (CYAN)	3 Byte	000 to 060 Note 1)
9	C,DETAIL B (BLUE)	3 Byte	000 to 060 Note 1)
10	C,DETAIL M (MAGENTA)	3 Byte	000 to 060 Note 1)
11	H.ENHANCE	3 Byte	000 to 015 Note 1), Note 2)
12	V.ENHANCE	3 Byte	000 to 015 Note 1), Note 2)
13	COLOR	3 Byte	000 to 127 Note 1), Note 3)
14	TINT	3 Byte	000 to 060 Note 1), Note 3)
15	SHARPNESS	3 Byte	000 to 015 Note 1), Note 3)
16	Main input function	3 Byte	Same as item 9 of QST commands
17	Main screen size information	1 Byte	Same as item 11 of QST commands
18	Check sum	2 Byte	
19	ETX	1 Byte	03hex

Note 1) If the signal type is not confirmed, dummy data is output.
Note 2) During video signal input, dummy data is output.
Note 3) During PC signal input, dummy data is output.

3) <QWB> Obtaining integrator/WHITE BALANCE information

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QWB (fixed)
3	R.HIGH	3 Byte	000 to 255 Note 1)
4	G.HIGH	3 Byte	000 to 255 Note 1)
5	B.HIGH	3 Byte	000 to 255 Note 1)
6	R.LOW	3 Byte	000 to 255 Note 1)
7	G.LOW	3 Byte	000 to 255 Note 1)
8	B.LOW	3 Byte	000 to 255 Note 1)
9	Main input function	3 Byte	Same as item 9 of QST commands
10	Main screen size	1 Byte	Same as item 11 of QST commands
11	Check sum	2 Byte	
12	ETX	1 Byte	03hex

Note 1) If the signal type is not confirmed, dummy data is output.

4) <QPS> Obtaining integrator/SCREEN information

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QPS (fixed)
3	H.POSITION	3 Byte	000 to 255 Note 1)
4	V.POSITION	3 Byte	000 to 255 Note 1)
5	H.SIZE	3 Byte	000 to 064 Note 1)
6	V.SIZE	3 Byte	000 to 064 Note 1)
7	CLOCK	3 Byte	000 to 255 Note 1), Note 2)
8	PHASE	3 Byte	000 to 031 Note 1), Note 2)
9	Main input function	3 Byte	Same as item 9 of QST commands
10	Main screen size information	1 Byte	Same as item 11 of QST commands
18	Check sum	2 Byte	
19	ETX	1 Byte	03hex

Note 1) If the signal type is not confirmed, dummy data is output.
Note 2) During DVI or video input, dummy data is output.

5) <QSS> Obtaining SETUP information

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QSS (fixed)
3	COLOR TEMP.	1 Byte	1: LOW 2: MID LOW 3: MIDDLE 4: MID HIGH 5: HIGH Note 1)
4	POWER MGT.	1 Byte	0: OFF 1: ON
5	AUTO POWER OFF	1 Byte	0: DISABLE 1: ENABLE
6	DNR	1 Byte	0: OFF 1: LOW 2: MIDDLE 3: HIGH Note 1)
7	MPEG NR	1 Byte	0: OFF 1: LOW 2: MIDDLE 3: HIGH Note 1)
8	CTI	1 Byte	0: OFF 1: ON Note 1)
9	PURECINEMA	1 Byte	0: OFF 1: ON Note 1)
10	COLOR DECODING	1 Byte	1: RGB 2: COMP1 3: COMP2 Note 1)
11	COLOR SYSTEM	1 Byte	1: AUTO 2: NTSC 3: PAL 4: SECAM 5: 4.43NTSC 6: PAL M 7: PAL N Note 1)
12	DVI SET UP (PLUG/PLAY)	1 Byte	1: PC 2: VIDEO Note 1)
13	DVI SET UP (BLACK LEVEL)	1 Byte	1: LOW 2: HIGH Note 1)
14	BRT.ENHANCE	1 Byte	0: OFF 1: ON Note 1)
15	SUB VOLUME	2 Byte	00 to 20
16	Main input function	3 Byte	Same as item 9 of QST commands
17	Main screen size information	1 Byte	Same as item 11 of QST commands
18	Check sum	2 Byte	
19	ETX	1 Byte	03hex

Note 1) In the case of set data that cannot be output because of the type of input signal, dummy data is output.

6) <QSO> Obtaining menu integrator/OPTION information

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QSO (fixed)
3	ENERGY SAVE	1 Byte	0: STANDARD1 1: MODE1 2: MODE2 3: MODE3 4: AUTO 5: MUTE 6: STANDARD2
4	PROGRAM/REPEAT timer	1 Byte	0: OFF 1: PROGRAM 2: REPEAT
5	SCREEN MANAGEMENT (ORBITER)	1 Byte	0: OFF 1: MODE1 2: MODE2 3: MODE3
6	SCREEN MANAGEMENT (SOFT FOCUS)	1 Byte	0: OFF 1: 1 2: 2 3: 3 4: 4
7	AUTO SETUP MODE	1 Byte	0: INACTIVE 1: ACTIVE
8	AUTO FUNCTION	1 Byte	0: OFF 1: INPUT1 2: INPUT4
9	PIP DETECT	1 Byte	0: INACTIVE 1: ACTIVE
10	SPLIT FREEZE	1 Byte	0: OFF 1: SIDE BY SIDE 2: PIP
11	SCREEN MASK	1 Byte	0: OFF 2: INVERSE 3: WHITE 4: RED 5: GREEN 6: BLUE 7: YELLOW
12	SIDE MASK R-LEVEL	3 Byte	000 to 255
13	SIDE MASK G-LEVEL	3 Byte	000 to 255
14	SIDE MASK B-LEVEL	3 Byte	000 to 255
15	VIDEO WALL (MODE)	1 Byte	0: OFF 1: 1 screen 2: 4 screens (2 x 2) 3: 9 screens (3 x 3) 4: 16 screens (4 x 4) 5: 25 screens (5 x 5)
16	VIDEO WALL (POSITION)	2 Byte	01 to 56
17	VIDEO WALL (TYPE)	1 Byte	0: NORMAL 1: ADJUSTED
18	VIDEO WALL (POWER ON DELAY)	1 Byte	0: OFF 1: ON 2: MODE1 3: MODE2
19	VIDEO WALL (ABL LINK)	1 Byte	0: OFF 1: ON
20	Spare (dummy)	1 Byte	* (FIX)
21	FAN CONTROL	1 Byte	1: AUTO 2: MAX
22	OSD DISPLAY	1 Byte	0: OFF 1: ON
23	OSD SIZE	1 Byte	0: LARGE 1: SMALL
24	OSD ANGLE	1 Byte	0: H 1: V
25	FRONT INDICATOR	1 Byte	0: OFF 1: ON
26	COLOR MODE	1 Byte	1: NORMAL 2: STUDIO

Sequence	Data Content	Size	Remarks
27	PRO USE UNDERSCAN	1 Byte	0: OFF 1: ON
28	PRO USE IMAGE PROCESS	1 Byte	1: NORMAL 2: PURE 3: MONOTONE 4: BLUE ONLY 5: HIGH CONTRAST
29	PRO USE SYGNAL TYPE	1 Byte	1: MOTION 2: STILL 3: NONE STD
30	FRC	1 Byte	0: OFF 1: ON
31	POWER ON MODE INPUT	1 Byte	See the table below.
32	POWER ON MODE MULTI MODE	1 Byte	See the table below.
33	POWER ON MODE MULTI INPUT 1	1 Byte	1: INPUT 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5
34	POWER ON MODE MULTI INPUT 2	1 Byte	1: INPUT 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5
35	POWER ON MODE VOLUME	2 Byte	0 to 42: In the case of last memory, FF
36	SEAMLESS SW	1 Byte	0: OFF 1: ON
37	SEAMLESS SW SELECT1		1: INPUT 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5
38	SEAMLESS SW SELECT2	1 Byte	1: INPUT 2: INPUT2 3: INPUT3 4: INPUT4 5: INPUT5
39	MIRROR MODE	1 Byte	0: OFF 1: X 2: Y 3: XY
40	MULTI SCREEN SET (S BY S SIZE)	1 Byte	1: NORMAL 2: FULL
41	MULTI SCREEN SET (S BY S LAYOUT)	1 Byte	1: MODE1 2: MODE2 3: MODE3
42	MULTI SCREEN SET (PIP SIZE)	1 Byte	1: 1 (SMALL) to 4: 4 (LARGE)
43	MULTI SCREEN SET (TRANSLUCENT)	1 Byte	0: OFF 1: 10 % 2: 20 % 3: 30 % 4: 40 % 5: 50 % 6: 60 % 7: 70 % 8: 80 %
44	MULTI SCREEN SET (BANNER PIP)	1 Byte	0: OFF 1: BOTTOM1 2: BOTTOM2 3: BOTTOM3 4: MID LOW 5: MID HIGH 6: TOP3 7: TOP2 8: TOP1 9: LEFT A: RIGHT
45	MULTI SCREEN SET (BANNER INPUT)	1 Byte	1: INPUT1 2: INPUT2
46	Main input function	3 Byte	Input functions of the main screen (refer to the following table for details)
47	Main screen size information	1 Byte	Main screen size (refer to the following table for details)
48	Check sum	2 Byte	
49	ETX	1 Byte	03hex

■ POWER ON MODE INPUT

Input functions (response)	INPUT
0	LAST
1	INPUT1
2	INPUT2
3	INPUT3
4	INPUT4
5	INPUT5
A	MULTI

■ POWER ON MODE MULTI MODE

Input functions (response)	INPUT
1	SIDE BY SIDE1
2	SIDE BY SIDE2
3	SIDE BY SIDE3
4	BOTTOM LEFT
5	BOTTOM RIGHT
6	TOP RIGHT
7	TOP LEFT

■ Main screen input function

Input function	Input
IN1	INPUT1
IN2	INPUT2
IN3	INPUT3
IN4	INPUT4
IN5	INPUT5
* * *	Unconfirmed (standby time)

■ Main screen size

Main screen size	Screen size
0	DOT BY DOT
1	4 : 3
2	FULL
3	ZOOM
5	WIDE
6	14 : 9
9	UNDER SCAN
A	2.35 : 1

7) <QSU> obtaining the audio status

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QSU (fixed)
3	Main volume	3 Byte	000 to 042
4	Audio mute status	1 Byte	0: OFF 1: ON
5	INPUT1 sub volume	3 Byte	000 to 020
6	INPUT2 sub volume	3 Byte	000 to 020
7	INPUT3 sub volume	3 Byte	000 to 020
8	INPUT4 sub volume	3 Byte	000 to 020
9	INPUT5 sub volume	3 Byte	000 to 020
10	Check sum	2 Byte	
11	ETX	1 Byte	03hex

8) <QCI> Obtaining time information

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QCI (fixed)
3	Time information	2 Byte	Hour (24 hour system) 00 to 23 Note 1)
		2 Byte	Minute 00 to 59 Note 1)
		2 Byte	Second 00 to 59 Note 1)
4	Dummy data	8 Byte	
5	Day of week	1 Byte	1: Sunday 2: Monday 3: Tuesday 4: Wednesday 5: Thursday 6: Friday 7: Saturday Note 1)
6	Check sum	2 Byte	
7	ETX	1 Byte	03hex

Note 1) During standby and when this command was initially set, the value at the time that power was finally shut off is transmitted.

9) <QAP> Obtaining machine name

Sequence	Data Content	Size	Remarks
1	STX	1 Byte	02hex
2	Command echo-back	3 Byte	QAP (fixed)
3	Machine name information	18 Byte	42 inch: A (North America model): PDP-427CMX******** G (Europe-general model): PDP-42MXE20*******
			50 inch: J (Japan model): PDP-507CMX-JP***** A (North America model): PDP-507CMX******** G (Europe-general/CKD model): PDP-50MXE20******* GS (Europe-general/silver model): PDP-50MXE20*******
4	Check sum	2 Byte	
5	ETX	1 Byte	03hex

■ **Table of commands not compatible with PDP-434CMX to PDP-425CMX**

AJN	Ends 232C integrator adjustment mode.	MCN	Turns off MASK CONTROL.
AJY	Starts 232C integrator adjustment mode.	MCY	Turns on MASK CONTROL.
COF	Displays present color off setting.	MGFS01	Turns on VIDEO WALL.
COFS00	Does not set color off.	MSCS01	Turns on MULTI SCREEN.
COFS01	Sets color off.	SIM	Displays present setting of SIDE MASK.
DPR	Resets still picture movement function.	SIMS01	Sets setting of SIDE MASK to normal.
FXO	Selects audio output fix.	SIMS02	Sets setting of SIDE MASK to overlay 1.
FRCS02	Sets FRC to MODE2.	SIMS03	Sets setting of SIDE MASK to overlay 2.
FRCS03	Sets FRC to MODE3.	SZMS04	Sets screen size to CINEMA.
GRAS04	Sets gradation to “DRE MID”.	SZMS08	Sets screen size to FULL 1035i.
GRAS05	Sets gradation to “DRE HIGH”.	MIR	Displays present MIRROR MODE setting
GRAS06	Sets gradation to “DRE LOW”.	PLN	Turns off center brightness correction.
GRAS07	Sets gradation to “HIGH CONTRAST”.	PLY	Turns on center brightness correction.
LNN	Prohibits loudness.	PUCS02	Sets PURE CINEMA to advance.
LNY	Permits loudness	VRO	Selects audio output variable.

■ **Table of commands not compatible with PDP-505CMX**

EDIS01	Sets DVI SELECT to PC.
EDIS02	Sets DVI SELECT to VIDEOS1.

■ Check Sum

This is data to which 2-Byte ASCII code is added to a data group returned by a QUEST command.

PC side

STX	ID	QUEST command	ETX
02 (hex)	2 Byte	3 Byte	03 (hex)

Set side

STX	QUEST command	Data	Check sum	ETX
02 (hex)	3 Byte	*Byte	2 Byte	03 (hex)

A detailed example is given below.

Example) The check sum value that is added when the QUEST command "QAA" returned the following 6-Byte data string.

Data group (ASCII) + check sum

QUEST command	Data (6 Byte)	Check sum
QAA	100128	xx (before calculation)

↓

The data group is put into binary code one character at a time then displayed (only the last two digits are displayed).

47 41 41 31 30 30 31 32 38

When these values are added the result is 1F5 (hex).

↓

xx, where xx is 0B (hex), is added to 1F5 so the last two digits are 00 (in this case 200).

↓

As the data format, OB is converted to ASCII code and sent.

↓

The following data is output from the Plasma Display side.

STX	QUEST command	Data	Check sum	ETX
02 (hex)	QAA	100128	0B	03 (hex)

**** The returned data group is in capital letters. Please keep this in mind when introducing it into the binary display.***

■ Examples of check sum applications

Example 1) When the data is missing 1 Byte

STX	QUEST command	Data	Check sum	ETX
02 (hex)	QAA	100 (missing data) 28	0B	03 (hex)

47 41 31 30 30 32 38

The data group is calculated according to rules by a PC application, and when these values are added the result is 1C4 (hex).

↓

A value xx, where xx is 3C (hex), is added to 1C4 such that the last two digits are 00 (in this case 200).

↓

Here, the check sum [OB (hex)] and the calculated [3C (hex)] do not match.

↓

Since they do not match, the PC application sends the QUEST command again and gets the data again.

Example 2) When 1 Byte of data in the data is unreadable

STX	QUEST command	Data	Check sum	ETX
02 (hex)	QAA	100328	0B	03 (hex)

47 41 31 30 33 30 32 38

The data group is calculated according to rules by a PC application, and when these values are added the result is 1F7 (hex).

↓

A value xx, where xx is 09 (hex), is added to 1F7 such that the last two digits are 00 (in this case 200).

↓

Here, the check sum [OB (hex)] and the calculated [09 (hex)] do not match.

↓

Since they do not match, the PC application sends the QUEST command again and gets the data again.

5.6 Screen Burning

When the same image is reproduced for a long period (still image, telop, etc.), the image is burned into to screen. It may be difficult to remove this image. Burning should be managed by making necessary changes in the video software, projection method, system configuration etc.
This display has a function that reduces this kind of burning.

[Example of still screens]

1. **When displaying a PC screen**
   - Examples: Power Point, Excel, Word etc.
2. **When displaying a monitor camera image**
   - Examples: images from an outdoor or in-store monitor camera
3. **When the same image is displayed repeatedly**
   - Exhibit explanation video in an art gallery or museum
4. **Images with permanent superimposed letters**
   - Visual information displayed by games, on karaoke screens, or at public facilities
5. **Image with lines permanently**
   - Facility guidance images etc.
6. **Image with a remaining peripheral mask**
   - 4:3 aspect, squeeze contents etc.

The above are typical examples of contents that easily cause burning.

■ **Menu mode**

① ENERGY SAVE setting (Refer to section 5.3.4, "Adjustment and setting in the Menu Mode 4) Energy Saving Setting" (pg. 178) and 5.3.7, "Adjustment and setting in the Menu Mode 12) Energy Saving Setting" (pg. 203).)
The screen brightness is controlled according to the input signal and by the brightness of the room.

② ORBITER Setting (Refer to section 5.3.4, "Adjustment and setting in the Menu Mode 7) Orbiter Setting" (pg. 181) and 5.3.7, "Adjustment and setting in the Menu Mode 15) Orbiter Setting" (pg. 206).)
This function gradually and randomly moves the image position vertically and/or horizontally after a set amount of time. Or the edges of the images are restricted by setting soft focus in order to soften images edges.

■ **Integrator Mode**

① SCREEN MASK Setting (Refer to section 5.4.3, "Adjustment and setting in the Integrator Mode 9) SCREEN MASK Setting" (pg. 225).)
An inverse or full mask signal appears on the screen.
When a full mask is prepared beforehand, it becomes more difficult for the screen to become burned.
Using an inverse signal may be an emergency measure when the screen is burned from displaying a still image. However, completely removing the burn is not possible.

② SIDE MASK Setting (Refer to section 5.4.3, "Adjustment and setting in the Integrator Mode 10) SIDE MASK Setting" (pg. 226).)
This setting adjusts the method of displaying the SIDE MASK signal and adjusts the signal level of the SIDE MASK signal.

■ **Menu Mode and Integrator Mode**

① PROGRAM TIMER Setting (Refer to section 5.3.4, "Adjustment and setting in the Menu Mode 6) Program/Repeat Timer Setting" (pg. 180) and 5.3.7, "Adjustment and setting in the Menu Mode 14) Program/Repeat Timer Setting" (pg. 205), "5.4.3, "Adjustment and setting in the Integrator Mode 8) Program Timer Setting" (pg. 223).)
The display contents change at a predetermined time according to set conditions.

■ **Standard Functions (Settings cannot be changed)**

① Auto Brightness Adjustment (still image detection)

When an image that has little or no motion, such as a photograph or computer screen, is displayed for a long period, the screen may appear dimmer. This feature is part of the screen-protection function, to automatically adjust the brightness and protect the screen when an image with little or no motion is detected. This function activates after an image with little or no motion has been detected for three minutes.

Note This function is not found in the menu (the setting cannot be changed).

To enjoy using your plasma display for many years;

You can use this plasma display's orbiter, inverse display and all white display and other functions to either prevent or reduce burning. When you will be displaying still picture contents for a long time, set these functions with your program timer to perform regular maintenance of your plasma display.

■ **Setting example**

Setting with Menu Mode

- OPTION → ENERGY SAVE: setting to MODE1 or MODE2 (refer to pg. 178 and pg. 203).
- OPTION → SCREEN MGT. → ORBITER: setting to MODE1, MODE2, or MODE3 (refer to pg. 181 and pg. 206).
- OPTION → TIMER SETTING → PROGRAM/REPEAT: Setting to PROGRAM (refer to pg. 180 and pg. 205)

Setting with Integrator Mode

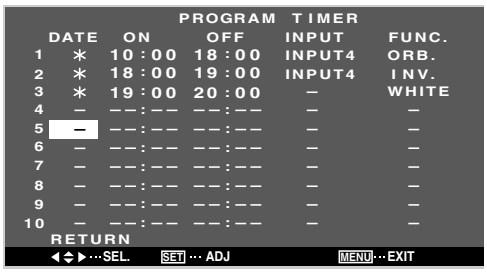
- OPTION → PROGRAM TIMER (refer to pg. 223)

Example of setting PROGRAM TIMER

- Case where one day operating time in daily operation is 10:00 to 18:00
- During operation INPUT4 (Component Video Signal) is displayed.
- Set contents
  - Inverse display for one hour after end of work period (18:00 to 19:00)
  - And after that, perform all white display for one hour (19:00 to 20:00) then end operation for the day.
  - The following day, power turns on at 10:00

The above is repeated every day.

Program Timer Setting Screen


PROGRAM TIMER
DATE ON OFF INPUT FUNC.
1 ✳ 10:00 18:00 INPUT4 ORB.
2 ✳ 18:00 19:00 INPUT4 INV.
3 ✳ 19:00 20:00 – WHITE
4 – --:-- --:-- – –
5 – --:-- --:-- – –
6 – --:-- --:-- – –
7 – --:-- --:-- – –
8 – --:-- --:-- – –
9 – --:-- --:-- – –
10 – --:-- --:-- – –
RETURN
◄▲▼►···SEL. SET ··· ADJ MENU···EXIT

(Setting example: supplementary)

1. All white display can be done even if program timer is stopped six months after operation begins.
2. When it is used for outdoor monitoring, all white setting is impossible, because of conspicuous fluctuation of brightness.

5.7 Precautions on Connecting Camera Images

Connecting and using moving images that are nearly still, such as images from a surveillance camera, could damage or reduce the life of the panel.
In this situation, it is necessary to set the image quality beforehand.
Set the 'ENERGY SAVE' function to 'MODE2' or 'MODE3' (pg. 178, 203).

5.8 Concerning frame delay (lip sync)

The following table shows the approximate time after the video signal is input until it appears on the display.
It is the guideline when considering the audio delay time following the video (lip sync).
The video signal is, in multi-screen mode, delayed by approximately 1 V (there is no delay that exceeds 4 V) in the following cases.

- Right screen of side by side mode (left screen in a case where the same signals are combined)
- Subscreen of picture in picture mode

There is no frame delay in other situations.

(These data are reference values; they cannot be ensured.)

FRC setting	Video input signal			Input vertical frequency (Hz)	Frame delay number (V)
ON	Video signal	Normal time	PAL, SECAM, PAL N, 625i (576i), 1125i (1080i)	50	4
			NTSC, 4.43NTSC, PAL M, 525i (480i), 1125i (1080i)	60	3
			625p (576p), 750p (720p),1125p (1080p)	50	2
			525p (480p), 750p (720p), 1125p (1080p)	60	1
		When zoom function is used *2	PAL, SECAM, PAL N, 625i (576i), 1125i (1080i)	50	4
			NTSC, 4.43NTSC, PAL M, 525i (480i), 1125i (1080i)	60	4
			625p (576p), 750p (720p), 1125p (1080p)	50	2
			525p (480p), 750p (720p), 1125p (1080p)	60	2
	PC signal			60	2
				75	
				85	
OFF	Video signal	Normal time	PAL, SECAM, PAL N, 625i (576i), 1125i (1080i)	50	3
			NTSC, 4.43NTSC, PAL M, 525i (480i), 1125i (1080i)	60	
			625p (576p), 750p (720p), 1125p (1080p)	50	1
			525p (480p), 750p (720p), 1125p (1080p)	60	
		When zoom function is used *2	PAL, SECAM, PAL N, 625i (576i), 1125i (1080i)	50	4
			NTSC, 4.43NTSC, PAL M, 525i (480i), 1125i (1080i)	60	
			625p (576p), 750p (720p), 1125p (1080p)	50	2
			525p (480p), 750p (720p), 1125p (1080p)	60	
	PC signal	Normal time	FRC setting object signal *1	50	1
				60	
				72	
			FRC setting non-object signal	60	2
				75	
				85	
		When zoom function is used *2	FRC setting object signal *1	50	2
				60	
				72	
			FRC setting non-object signal	60	2
				75	
				85	

*1: The FRC object signal in the PC signal is as follows.
640x480@60 Hz VGA, 848x480@60 Hz WVGA, 1280x768@60 Hz WXGA 1024x768@60 Hz XGA, 1280x1024@60 Hz SXGA, 1024x768@50 Hz XGA 1024x768@72 Hz XGA, 640x480@50 Hz VGA (only analog input), 848x480@50 Hz WVGA 1280x768@50 Hz WXGA, 1280x768@72 Hz WXGA, 1400X1050@60 Hz SXGA+

*2: The zoom function indicates the expansion functions based on H size, V size, and video wall in point zoom and integrator modes.

6.1 Precautions

1) If the power shuts down and stays OFF for an extended time, an internal problem has probably occurred (failing part, etc.).
   Turn OFF the main power switch on the Plasma Display then wait one to two minutes then try turning the power ON again.
   If the power goes OFF again, the display needs to be serviced.
   If the display operates normally, the power reset has cleared the issue.

2) When an image (still image, telop or subtitle, etc.) is shown on the screen for a long period, there is a possibility that the image could burn in. This should be managed by making changes in the imaging software, display method, system configuration etc.

3) The following kinds of input signals could cause inferior image quality (when a PDA-5003/PDA-5004 card is installed).
   - Video signal that has been dubbed (copied) repeatedly
   - Copyright-protected signals
   - Scrambled cable TV signals
   - Signals with a sync signal and video signal that are extremely out of phase

4) The fan starts operating when the surrounding temperature is greater than 32 °C (the fan rpm becomes faster as the temperature increases, this is normal).

5) Screen-saver function (still image detection)
   When an image having little motion such as a photograph or PC screen is displayed continuously, the image may appear dimmer. To protect the plasma panel, the screen-saver function detects images with little or no motion and automatically adjusts the brightness. This action is not an indication that the display is failing.
   Time until the screen-saver function operates:
   - Normal-operation mode/menu mode: Approximate three minutes after the power is turned ON or after the input is switched

■ Self-diagnosis Function

When there is an operating or connection error, a message appears on the screen.
After reading the contents of the error message, check the condition of the unit.

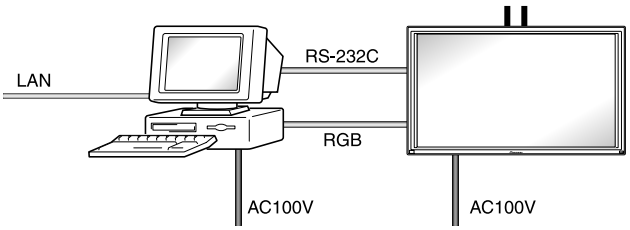
Error Message	Remedy
CAUTION OUT OF RANGE UNSUPPORTED SIGNAL SIGNAL NG	● The current signal input is not supported by the unit. Check the table of supported input signals on pg. 146 to 161 and change the output signal setting.
WARNING THERMAL ALERT SHUT DOWN	● Turn OFF the main power. ● Check whether the surrounding temperature is high. ● If the cooling vents on the display are blocked, remove the obstacles blocking the vents.
WARNING FAN FAILURE SHUT DOWN	● There is a problem with the fan. Immediately turn OFF the power and contact a Pioneer service center or dealer.
ERROR INVALID KEY ENTRY	● An invalid operation was attempted. Check the input signals, connections and settings.
SHUT DOWN	● Turn the main power OFF, wait one or two minutes and turn the power ON again. If the problem still persists, remove the power plug from the outlet and contact a Pioneer service center or dealer.

Maintenance

1) Be sure to unplug the power cord from the power outlet before performing maintenance.

Note

If the plasma display is connected to a computer linked to a network, disconnect and reconnect using the following procedure.



■ Disconnect and Remove Hardware

① Turn the plasma display to Standby using either the computer (RS-232C control) or the remote control.
② Turn off the power to the computer.
③ Turn off the main power to the plasma display.
④ Remove the RS-232C cable and RGB cable from the plasma display.
⑤ Remove the RS-232C cable and RGB cable from the computer.
⑥ Remove the power cord from the computer.
⑦ Remove the power cord from the plasma display.
⑧ Finally remove hardware.

■ Connection procedure

① Connect the power cord of the plasma display to an AC power source.
② Connect the power cord of the computer to an AC power source.
③ Connect the RS-232C cable and RGB cable to the computer.
④ Connect the RS-232C cable and RGB cable to the plasma display.
⑤ Turn on the power to the computer.
⑥ Turn on the main power to the plasma display.
⑦ Turn on the plasma display using either the computer (RS-232C control) or the remote control.

Note

After disconnection, wait for approximately 10 minutes before reconnecting the units.

2) Cabinet and Remote-control Unit

Never use solvents such as benzene or thinner. Using such solvents could cause the cabinet and remote control to degrade the coating.

Wipe the cabinet and remote control with a soft cloth. If there is heavy soiling, soak a soft cloth in water mixed with a mild detergent. Ring out the water well then clean the panel. Dry the chassis by wiping with a soft, dry cloth.

3) Screen (front protection panel)

The screen (front protection panel) is treated with a special coating to prevent glare and is very delicate. To clean it, remove any dust then wipe gently with a soft cloth. Do not clean it with tissue or a rough, textured cloth.
DO NOT use solvents such as benzene or thinner to clean as this could damage or discolor the display panel.
The following cleaning cloths and cleaning liquid are recommended.

Name	Part Number
Cleaning cloth: Wiping cloth	AED1285
Cleaning cloth: Minimax	GED-009
Cleaning liquid: B4	GEM1004

In the case of light soiling, remove the dust then gently wipe with a Minimax cloth. If there is heavy soiling, remove the dust then apply a small amount of B4 cleaning liquid to an area of the Minimax cloth, do NOT apply the liquid to the panel. Any of the cleaning chemical left on the unit may make the surface uneven. After the B4 has dried, wipe it clean with a dry Minimax cloth.

4) Vents

Once a month, use a vacuum cleaner set to LOW to remove dust from the cooling vents on the sides and rear of the unit and in the fan installation area. The main power switch MUST be turned OFF before cleaning the vents. Using the unit with accumulated dust causes the internal temperature to rise and could cause fire or other trouble to occur.

5) Readjustment of the White Balance

This unit uses phosphor elements as in a CRT display than degrades over time, reducing the brightness. Blue phosphor elements degrade faster than red or green.
* Occasional readjustment of the white balance may be beneficial.